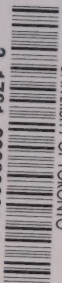


FACULTY OF DENTISTRY LIBRARY
UNIVERSITY OF TORONTO



3 1761 03926861 0



Digitized by the Internet Archive
in 2025 with funding from
University of Toronto

<https://archive.org/details/31761039268610>

dent

THE CANADIAN DENTAL HYGIENISTS ASSOCIATION
JOURNAL DE L'ASSOCIATION CANADIENNE
DES HYGIENISTES DENTAIRE

PROBE



VOL 29, NO 1

JAN/FEB 1995 JAN/FÉV

224



Rosalie Shapiro
RDH

WHAT'S INSIDE:

• QUALITY ASSESSMENT

• APPLIED ETHICS: VO

• HALIFAX CONFERENCE

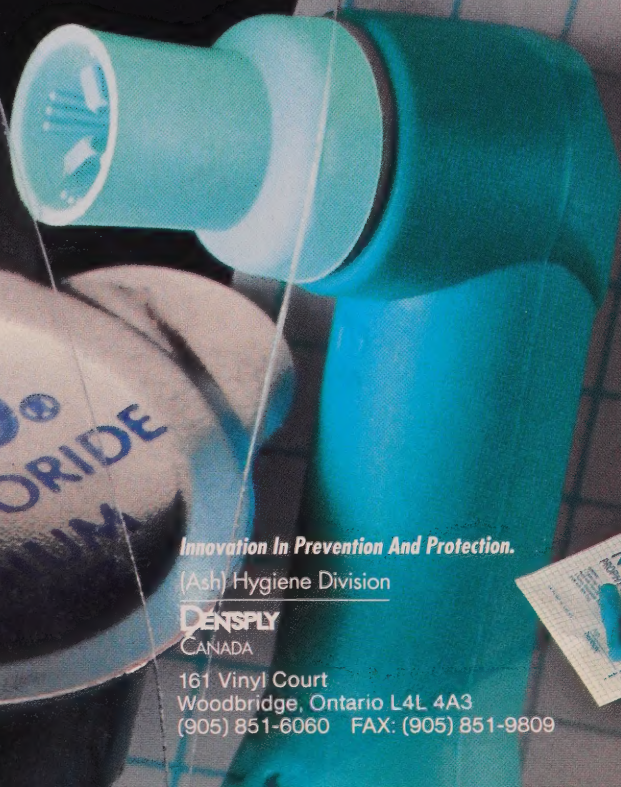
DENTAL LIBRARY
UNIVERSITY OF TORONTO
124 EDWARD ST.
TORONTO M5G 1G6
ONTARIO, CANADA

GRAND OPENING!

**Introducing the NUPRO™ Propphy Pack...
the ultimate prophy, packaged for value!**

It's a complete prophy in one convenient pouch ... one cup of mint flavored NUPRO® Propphy Paste, in any one of four precise grits (fine, medium, coarse and plus), and a high performance NUPRO™ Disposable Propphy Angle with a natural rubber, soft cup.

And the great news is, because they're packaged together it's a better way to buy ... that's value!

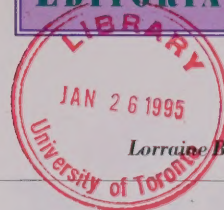


Innovation In Prevention And Protection.

(Ash) Hygiene Division

DENSPLY
CANADA

161 Vinyl Court
Woodbridge, Ontario L4L 4A3
(905) 851-6060 FAX: (905) 851-9809



Look Beyond the Obvious

By:

Lorraine Boomhour, Dip DH

Without a doubt, most of us ask our patients how they are feeling at the beginning of their appointment. And, if your experiences reflect mine, the response is generally "fine". However, occasionally, you know, by their tone, that something is *not* fine.

Dental hygienists must be more than excellent clinical technicians. It is not enough to concentrate solely on the mouth. If the patient is sick how can we possibly expect their mouth to be healthy? There are numerous courses and consultants available to help us focus on the clinical aspects of dental hygiene but we, as members of the health care profession at large, must broaden our horizons by learning more about general health issues too.

The trend today is towards wellness and total body health. More people than ever are exercising and watching their diets. When taking medical histories we must take care to ask precise and direct questions. We must listen carefully. We can gain even more information by observing. If we take the time to watch our patients as they walk from the reception area to the treatment area, we may detect subtleties that provide clues to how they *really* feel. There is much to be gained from simple observations and we must learn to incorporate this information into our general assessment of a patient's total well-being.

Before we begin to help our patients we must work towards having "our own house in order." That is, we must make every effort to practice what we preach. We must use stress management techniques, quit smoking, eat sensibly, manage our weight, exercise regularly, enhance our diet with vitamin and mineral supplements and ensure we have adequate rest and relaxation opportunities. As Richard Bach says in his book *Illusions*, "You teach best what you most need to learn."

More and more we are providing oral health care to individuals who suffer from one disease or another. It is not uncommon for dental hygienists engaged in private practice to treat patients suffering from chronic fatigue syndrome, fibromyalgia, cancer, scleroderma, HIV, or other unique ailments. Many of these diseases simply didn't exist (or at least weren't diagnosed) when we graduated from our dental hygiene programs. We need to



LORRAINE BOOMHOUR, Dip DH

know the signs and symptoms of these diseases, their oral manifestations and how they affect dental hygiene treatment.

Where, you ask, can we get more information on general health issues, to better prepare ourselves for our responsibilities as Dental Hygienists in the larger health care picture? We can begin by asking our patients about their experiences with their disease, particularly its oral manifestations. By becoming a partner in helping them deal with their disease in addition to its impact on their oral health care we will be offering valuable support. Meanwhile, read all the available material at your local library, ask questions of other health care professionals, organize a continuing education day at your local component society with the emphasis on these diseases, and make an effort to read every health care magazine that is available to you.

There are also some practical 'information avenues' available to most of us. For example, Canada's Food Guide* presents an excellent dietary plan to share with patients who require more information about nutrition. Copies of this guide can be made available, at no charge, to your patients. Consider making them available in the reception area and in your treatment area. Oral health is influenced dramatically by diet — encourage your patients to 'eat healthy'. Suggest they reduce their fat intake. (Canadians generally eat

about 25% more fat than they should thus clogging their cardiovascular system.) Encourage your patients to eat less salt, drink less alcohol, have less caffeine and generally lead a 'Heart Smart' life. Consider utilizing resources available through the Canadian Heart Foundation to educate your patients in this area. (It has an office in each province and provides information for the public at no charge). The Canadian Cancer Society also offers a wealth of health information on cancer, diet and related issues.

Many of our patients may suffer from undiagnosed osteoporosis. Osteoporosis is a disorder that causes bone to become less dense and develops without presenting any identifiable warning signs. It is a long-term health hazard sometimes associated with hormone imbalances. Regular medical and gynecological examinations will reveal the need for medical intervention. Educate your patients about this disease and encourage them to consult their physicians and have regular physical examinations.

As the general population ages more drugs are being prescribed. We need ready information on drug interactions, side effects, complications and how it might affect our dental hygiene treatment. Mosby's Dental Drug Reference** contains profiles for the two hundred most commonly prescribed drugs. This is a 1994 reference and a must if one is to keep current with the new medicine. (Also available on IBM Disc.)

For some of you, this information may seem very basic. True, much of this is, in many respects only common sense, but I think that at times we get so caught up in our clinical and therapeutic treatment, time pressures and production pressures that we overlook the obvious. I urge you to look closely at the person who is carrying the "teeth" into the office. Look and listen my dental hygiene colleagues and you will be well rewarded — by the knowledge that your patient is genuinely cared for and by your own personal satisfaction in knowing that you are not only doing the job, but doing it *well*.

*Health Canada, Ottawa, ON K1A 0K9
(613) 954-5995

**Mosby's Dental Drug Reference, Authors:
Gage and Pickett

not just for kids!

THE INTERPLAK® ULTRA COMPACT – THE NEXT GENERATION

Dental professionals spoke. And we listened.
Introducing the *Interplak® ULTRA Compact*. Newly designed
and developed especially for your pediatric patients'
toothbrushing needs.

It's smaller – it's lighter – it's easier to remove the
brush head – *It's the compact Interplak®!*

Utilizing our patented counter-rotational bristle
motion, the *ULTRA Compact* works like every
Interplak® –

the bristles flare out with each revolution,
to gently remove plaque from between the
teeth and deep beneath the gums. The kids
need this advantage over brushing with an
ordinary toothbrush, to maintain healthy
teeth and to eliminate plaque,
the leading cause of gum disease.

Of course the *ULTRA Compact* can
be used by anyone, but it is ideally
suited to a smaller mouth, which
gives you the opportunity to
recommend *Interplak®*
technology to entire families!



For more information
on the new Interplak
Ultra Compact call:
1-800-361-2816

INTERPLAK®
POWER PLAQUE REMOVER

**BAUSCH
& LOMB**

**ULTRA
COMPACT**



COLLEAGUES FROM COAST TO COAST

This issue's cover features Rosalie Shapiro of Toronto, ON. Rosalie is a graduate of the University of Toronto's Dental Hygiene Program (1964) and has worked in private practice in Toronto ever since. She is currently working in a family practice and 2-year old René (on the cover) had just received a prophylaxis while sitting on his mom's lap — a positive 'first experience' at the dental office reports Rosalie! In her spare time, Rosalie practices Iyengar Yoga (and has been doing this for the past nine years). She is pictured here with her instructor, BKS Iyengar of India when he was visiting North America in 1993. Rosalie says she practices yoga 1-1½ hours daily and finds the experience exhilarating. "It helps me cope with long and sometimes stressful days," she writes. Rosalie has been a CDHA member since its inception and sits on the Board of Directors of the Ontario Society for Preventative Dentistry.

Editorial 3

Look Beyond the Obvious
— Lorraine Boomhour, Dip DH

President's Message 7

The Survey Says...

Letters to the Editor 8

News 9

Scientific

1) Quality Assessment in Continuing Education: 13
An Example of an Instrument Sharpening Workshop for Dental Hygienists
— Nancy Keselyak, BSc (DH), MA, Linda Maschak, Dip DH

2) Applied Ethics: Voicing our Values 18
— Gary Chiodo, DMD

Resource Centre — New Acquisitions 21

Abstract 22

Oral side effects of the most frequently prescribed drugs
— prepared by Carol Barr Overholt, Dip DH

CDHA 6th Annual Professional Conference 23

Preliminary Program / Registration Form

Ethics: Sharpen Your Professional Edge 26

— Nancy Neish, BA, Dip DH, Brenda Fortune, Dip DH

Self-Assessment Test 28

A Brief Overview of Preventive Dentistry in Dental Hygiene

Continuing Education 29

Book Reviews 30

Practice Profile 31

— Penny Ropchan, Dip DH — Manufacturer's Representative,
DENTSPLY (Ash) Hygiene Division

Student Scene 33

Classifieds 34

The Canadian Dental Hygienists Association Journal: Probe is the official publication of CDHA. CDHA invites submissions of original research, discussion papers, and statements of opinions pertinent to the dental hygiene profession. All manuscripts are refereed anonymously. Contributions to Probe do not necessarily represent the views of the CDHA, nor can CDHA guarantee the authenticity of the reported research. Copyright 1986. All materials subject to this copyright may be photocopied for the non-commercial purpose of scientific or educational achievement.

CONTENTS



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

PROBE JANUARY/FEBRUARY 1995 JANVIER/FÉVRIER

Editorial Director/Scientific Editor:
D. Landry, Dip DH, Dip DN, BA, BV/TED
Managing Editor:
J. Edgar, BJ

Statistical Reviewer:
R. Dunford, BSc, MSc

Contributors:
Carol Barr Overholt, Dip DH
Leanne Carlson-Mann, Dip DT, Dip DH
Nancy Neish, BA, Dip DH, MEd
Brenda Fortune, Dip DH

Editorial Board:
E. Brownstone, BA, Dip DH, MEd
S. Amer, Dip DH, MS
L. Boomhour, Dip DH
M. Goulding, Dip DH, BSc
L. Guest, Dip DH, BHE

Design:
Nancy Poirier Type Services

Published six times a year by the
Canadian Dental Hygienists Association,
Centrepointe Chambers, 96 Centrepointe Drive
Nepean (Ottawa), Ontario K2G 6B1
Tel (613) 224-5515
Canada Post Publications
Mail Registration No. 5793

CANADIAN POSTMASTER:
Notice of change of address and undeliverables
should be sent to the

Canadian Dental Hygienists Association
Centrepointe Chambers, 96 Centrepointe Drive
Nepean (Ottawa), Ontario K2G 6B1
Subscriptions \$69.55 (GST included) in Canada, \$110.00 Cdn.
for U.S. & \$115.00 Cdn. elsewhere. Fifty cents per issue is
allocated from membership fees for Journal production. All
statements are those of the authors and do not necessarily
represent CDHA, its executive, or its staff.

Advertising & Subscriptions:
Keith Health Care Communications
1382 Hurontario Street
Mississauga, Ontario L5G 3H4
(905) 278-6700

© CDHA 1995
Member Publication American Association
of Dental Editors
6176 CN ISSN 0 834-1494
GST Registration no. R106845233



CDHA Central Office Staff

Executive Director	Carol Matheson Worobey
Manager, Publications & Conference	Janice Edgar
Financial Coordinator	Monique B. Rock
Member Services Coordinator	Sandra Vanwart
Member Services Assistant	Sue Turcotte
Administrative Assistant	Donna Awrey

All CDHA members are invited to call CDHA's Central Office,
toll-free, with their questions/inquiries:
1-800-267-5235, Fax (613) 224-7283
We look forward to serving you.

CALL FOR APPLICANTS



/ Procter & Gamble Inc.

Graduate Student Research Award

Objective: To promote the research training of Canadian dental hygienists in research oriented Masters or Doctoral programs.

General Description: An award of \$5,000 will be given annually to a highly qualified candidate enrolled as a graduate student in a Masters or Doctoral program.

Eligibility: Applicants for this award must be Canadian Dental Hygienists who are active, associate, student or life CDHA members, in good standing, who may be studying full or part time. Applicants must present evidence of having been accepted by a recognized academic institution.

Applications: The deadline is April 1, 1995. Applications must be submitted on forms available from CDHA's Central Office.

Duration: This award is made for one academic year for full-time students or the equivalent for part-time students. The award may be renewable for one additional academic year or its equivalent on receipt of a satisfactory progress report. The progress report must detail work to date and include any pre-prints or reprints arising from the work. Any request for renewal of this award should be accompanied by a letter from the research supervisor and one other referee.

Condition of Support: On completion of studies, recipients of this award agree to provide a bound copy of the thesis or project to CDHA's Central Office.

For further information and application forms contact:

Canadian Dental Hygienists Association
CentrepoinTE Chambers
96 CentrepoinTE Dr.
Nepean (Ottawa), ON K2G 6B1

AQUAFRESH STUDENT HYGIENIST SCHOLARSHIP PROGRAM

What is the Aquafresh Scholarship Program?

The Aquafresh Scholarships are awarded to undergraduate dental hygiene students for their contributions to the advancement of dental hygiene.

The program consists of:

- Two — \$1,000.00 scholarships to be used toward dental hygiene education expenses.
- Air travel expenses to and from the CDHA Annual Professional Conference and four nights accommodation at the conference hotel. (Conference registration will be paid by the CDHA.)

Who is Eligible?

- All undergraduate dental hygiene students.
- All applicants must be CDHA student members.

How to Apply

- All applicants must submit, in writing, a description of their involvement with the Canadian Dental Hygienists Association.
- All applications **must** be accompanied by the endorsement of two CDHA members.

Criteria for Judging

- Demonstrated involvement in the Canadian Dental Hygienists Association e.g. • Submitted material for publication in the CDHA Journal and/or Explorer.
 - Demonstrated a keen interest in national dental hygiene issues.
 - Demonstrated qualities of leadership.
 - Participated in National Dental Hygiene Campaign.
 - Participated in national/international conferences such as table clinic presentations, poster sessions, presentations, etc.
- All applicants must describe how they have promoted oral health and the profession of dental hygiene in the community.

Note: The successful candidate must agree to submit, for publication, an article outlining his/her accomplishments/involvement.

Application Deadline

Applications are to be submitted to CDHA's Central Office by April 1, 1995.

Send applications to: Canadian Dental Hygienists Association
96 CentrepoinTE Dr., Nepean (Ottawa), ON K2G 6B1
Attn: Carol Matheson Worobey
Re: Aquafresh Scholarship

CALL FOR APPLICANTS CDHA Dental Hygiene Research Grant

Objective: To support Canadian Dental Hygienists engaged in research that enhances the dental hygiene profession's ability to promote health and well-being.

General Description: A grant of \$5,000 will be awarded annually to a Canadian Dental Hygienist involved in qualitative or quantitative research as a principal investigator or co-investigator. Preference will be given to research projects relevant to the discipline of dental hygiene and the goals of the CDHA.

Eligibility: Applicants for this grant must be academically qualified Canadian Dental Hygienists who are active or life CDHA members in good standing. Evidence of academic credentials at the Masters and/or PhD level is required.

Applications: The deadline is March 31, 1995. Applications must be submitted on forms available from CDHA's Central Office.

Condition of Award: On completion of the research project, recipients of this grant agree to provide a written report for the Probe or reprints of journal articles to CDHA's Central Office.

For further information and/or an application form contact:

Canadian Dental Hygienists Association
CentrepoinTE Chambers
96 CentrepoinTE Drive
Nepean (Ottawa), ON K2G 6B1

The Survey Says. . .

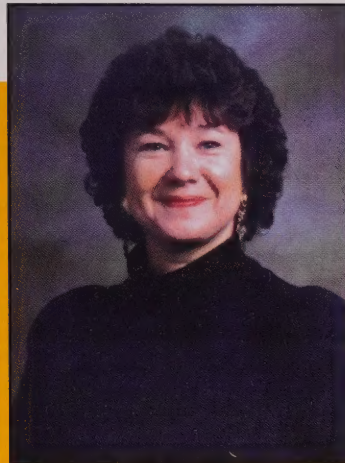
I suspect we have all heard things, read things, seen things and afterwards remarked, "I knew that." Be forewarned, you may have the same reaction after reading this message, because the ideas I want to share may have already occurred to you. Should that be the case, I hope this message will confirm your thoughts and knowledge and stimulate discussion.

Two items I read recently prompt this message, one short, a mere paragraph in length, the other, a 117-page Working Paper.

The paragraph that caught my attention was featured in the Canadian Dental Association's newsletter, *Communiqué* (June 1994). The *Communiqué* item highlighted some of the results of a national telephone survey released earlier this year. The survey reported that the number one oral health issue of concern to the majority of the 400 women and 400 men asked was tartar buildup. I was impressed to learn that the majority of Canadian adults surveyed recognized calculus accumulation as an oral health problem and would suggest the responses received to this question demonstrate that the information shared by dental health professionals and corporate advertisers has had an impact on consumer awareness.

As professionals concerned with oral health and hygiene, dental hygienists must work with consumers to help them find solutions to their problems. Effective preventive and treatment strategies as well as effective and equitable delivery strategies are required to address the variety of barriers that often get in the way of people obtaining the care they require and desire. Barriers take various forms including physical, financial and legal obstacles. To reduce the barriers, dental hygienists must continue to research the causes of such barriers, be aware of the objective conclusions presented in research conducted by others related to this issue and apply that knowledge to the current health care situation. In addition, we must continue to work with the public, governments and other health care providers to inform them about these issues and work with them to improve the system.

This brings me to the next source of information I would like to share with you. It focuses on improving access to dental hygiene care as well as improving cost-effectiveness. The Working Paper entitled "Health Human Resources Substitution: A Major Area of



MAXINE BOROWKO,
DIP DH, DIP DT, CERT VIT ED

Reform Towards a More Cost-Effective Health Care System" was written by Pran Manga and Terry Campbell of the University of Ottawa. The report was jointly sponsored by the federal government, four provincial governments, four professional and industrial associations and representatives of the business sector. In short, the paper (1) highlights and discusses the benefits of substituting other health care providers for physicians, dentists and pharmacists; (2) examines primary care as an appropriate vehicle for effective human resource substitution; and (3) looks at the neglected issue of equity.

Manga and Campbell use research and reason to present their ideas relating to Dental Hygienists. According to their report, there is a potential to save up to 30-40% of dental care costs through appropriate task delegation, and furthermore, that organized Dentistry has limited the potential substitution of dental hygienists (and other allied dental personnel) for dentists by exerting its influence to ensure restrictive regulation governs the practice of dental hygiene. The report states that, "Dentistry's most blatant use of power has been the imposition of stringent supervisory requirements for hygienists, particularly in the private practice setting." The authors also suggest that the non-competitive nature of dentistry in Canada results in higher income and more leisure time for providers rather than lower costs for consumers.

Another finding (consistent with the results mentioned earlier in reference to the CDA *Communiqué* item) is that the vast majority of Canadian adults who seek dental care do so for the purposes of having "a dental check up and cleaning".

The conclusion of this report, in relation to the dental hygiene profession, suggests that we do indeed belong to a profession that can meet consumer needs at reduced costs while maintaining quality of care.

"Significant evidence substantiates the fact that dental hygienists are technically capable of providing expanded dental functions, including restorative work, without sacrifice in quality or patient satisfaction. The expanded dental function, however, has been effectively thwarted due to political pressures from the dental profession. Because Canadian dental hygienists have historically been regulated by dentistry, the profession has forced them to function as a complement rather than substitute. The imposition of strict supervisory restrictions has been one of the mechanisms used to ensure this. The most obvious way for consumers to benefit from the cost-effectiveness of dental hygienists is for hygienists to become independent practitioners, either in group settings or as solo practitioners, thereby becoming competitors of dentists."

On the topic of primary care, the authors conclude that a coordinated primary care system would make the most effective use of health care resources substitution. In light of current trends towards greater involvement by communities in health care delivery and the emergence of community-based health care centres that utilize a multidisciplinary team approach, I feel there is reason for optimism. In the future dental hygienists will be able to make significant contributions in a wider variety of practice settings than is currently the case.

The equity issue presented in this Working Paper is considered to be an issue neglected and discounted by health bureaucrats. Manga and Campbell argue it is unfair for the public and some health care professionals to be denied the benefits of health personnel substitution when the quality of care is equal and the cost-effectiveness greater. In summary, they believe human resource substitution is not a technical but rather a political issue. What do you think?



LETTERS TO THE EDITOR

Dear Editor:

The letter from Sharon Compton, printed in the September/October issue (Vol 28 No 5) of the Canadian Dental Hygienists Association Journal, *PROBE*, prompted me at first to reply gratefully "yes! yes!". I wholeheartedly agree with Sharon that now is a good time to reconsider the purpose and format of the only Canadian journal for dental hygienists. The messages signaled by the cover photos are only one aspect in question.

The cover is a critical issue because readers are initially affected by the impact of the design, print and colour. The desire of the reader to continue to read, to enjoy, and to learn may be enhanced or diminished by this impact. Without question the editors and editorial board, past and present, have attempted to be as inclusive as possible in meeting the needs of the majority of dental hygienists in Canada. A colourful, personal photo of a dental hygienist "in real life" may appeal to many. In fact, however, the reality is that what links and binds us together is our professional lives as dental hygienists — in practice, education, and research — in a rapidly evolving health profession within an age of health care reform.

That rapidly evolving role has taken us through many milestones including the mechanisms summarized by Gallagher and Forgay, also in the September/October issue (Vol 28 No 5) of the Journal. We have much of which to be proud as an evolving health profession. Yet a major hallmark of a profession is the body of knowledge it claims as its own. Knowledge and how it is understood is fundamental in every profession and includes all aspects from preparation of the student through graduate practice and maintenance of quality. The very small number of articles in the Journal which contribute substantively to this knowledge base for dental hygienists appear to be testimony to the slow progress in this aspect of our development. Perhaps you as Editor could tell us if the numbers of articles printed are reflective of the numbers received or if the editorial preference is for fewer of these "scientific" articles. (I hesitate to use the word "scientific" because that word raises many questions about what is and what isn't legitimate but, I believe, this is the term most frequently used.) If the former is the case, then where are dental hygienists publishing their research and contributions to our knowledge base? And if they are not publishing elsewhere, why not? The worst case scenario is that we are not publishing and sharing our knowledge because we are not capturing it, understanding it, using it and disseminating it. More likely though, we simply need to

transcribe into completed papers the hundreds of abstracts and papers that have been presented at meetings in the past few years.

This is, for me, a much greater concern than the style of the cover. But, to be honest, I personally would prefer a cover more congruent with other established refereed journals, and that includes putting to rest forever the *PROBE* part of the title. The Journal of the Canadian Dental Hygienists Association, would no doubt, be received happily by librarians and data base managers everywhere.

I am eager to see your response and those of others on this important issue of our primary method of communication about our profession.

Yours sincerely,

Joanne Clovis, Dip DH, BEd, MSc
Halifax, NS

Ed. Note: Every scientific article sent to *PROBE* is eagerly accepted and submitted to the peer review process. However, the number of scientific submissions received is nominal and several that are received are, according to the comments of the reviewers, not ready for publication. The peer review process often seems to alienate and frustrate contributors, however, if the Journal is to maintain its credibility it is a process that must be strictly followed. The Editorial Board identified the lack of scientific submissions to the journal as a problem at its meeting in June. Several avenues to change this reality are being explored, including the development of a Manuscript Writing Workshop to be delivered by *PROBE*'s former Scientific Editor, Marilyn Goulding, in conjunction with CDHA's Annual Professional Conference. We are also promoting a Mentoring Program that pairs seasoned writers with individuals who are writing for publication for the first time. These initiatives will take time, effort, dollars and commitment and we are open to any other suggestions that will, in time, increase the number of scientific submissions forwarded (and ultimately published) in *PROBE*.

Dear Editor:

I am compelled to write this letter to commend you and my colleagues, who make contributions to the *PROBE*. You make me proud to be a Canadian Dental Hygienist. Our Journal has excellent content which addresses the variety of needs of hygienists across the country.

Glancing at the cover page motivates a look inside to see the hygienist in a clinical setting. I find "the cover person" inside on the table of contents page, which invites me to peruse the

many stimulating offerings within our journal. Did you do that on purpose? I enjoy learning about the eclectic interests of our members, and that their lives extend outside a sole focus on dental hygiene. We are real people, not just cleaning ladies with the ability to write research papers!

A big thank you for continuing to stimulate interest in our journal and sometimes taking the tougher trek down the road less traveled.

My cup is half **full** and heading for the brim, not half **empty**! Thank you for continuing to pour!

Respectfully submitted,
Susan Raynak, RDH
Thunder Bay, ON

PROBE's Editorial Board suggested the start of a new year would be an appropriate time to surface with a 'new cover look'. We hope the changes we have made to the Journal's cover address the comments made by our members over the past several months and meet with your approval.

In an effort to achieve a balance of the needs expressed, we have attempted to create a look that balances the professional and personal spheres of our members. The cover image will focus on our members actively involved in their *professional roles* thereby achieving a more 'scientific look'. The personal appeal will be maintained by focusing on our members and sharing some details about their personal interests, albeit, *inside* the journal.

If this approach is to be successful we need *your* help. We want to portray dental hygienists in *all* their roles. We urge you to submit self-photos that focus on you carrying out your roles and responsibilities as a member of the Dental Hygiene profession. This request extends far beyond the call for photos of our members in their private practices working in the mouths of clients. Consider the multitude of *other* tasks you undertake: educating your clients and the public at large (i.e. participating in community activities, NDHC events), participating in continuing education opportunities, conducting research, educating your colleagues, performing administrative tasks relevant to your work — from inputting chart notes on computerized records to ordering supplies for your practice. Send us a photo of you at work and at play and we will make an effort to share your submission with your colleagues.

Executive Council

President
Maxine Borowko
President Elect
Margery (Marnie) Forgay
Vice President
Sue MacIntosh
Past President
Fran Richardson Cotton

Member Services

Chair, Aileen Seed
Diane Skene-Derksen

Audrey Newcombe
Luiza Mohan
Barbara Hewton

Health Promotion

Chair, Judy Parker
Sharyn Milroy
Wanda Staples
Patricia Noble
Heather Tommy

Practice & Regulation

Chair, Judy Clarke

Darlene Armstrong
Pamela Vokey
Sue Raynak
Kathleen Adams

Professional Development

Bonnie Craig
Charla Lautar
Stephanie Nagle
Eleanor McIntyre
Corinna Recker

**Health Canada
Representative to
Board**
Sharon Amer

**Corporate Relations
Officer**
Joan Degun

Speaker
Lynn James

**IFDH
Representatives**
Dale Scanlan
Ellen Brownstone

NDHC Coordinator
Dawn Mueller



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

Your Professional Partner

Federal Government Officially Recognizes National Dental Hygiene Week

During the Commons Debates held on October 20, 1994, Mr. Andy Scott, Liberal MP for Fredericton-York-Sunbury made the following address which has been excerpted from Hansard:

"Mr. Speaker, it is my pleasure to bring to the attention of members of the House and all Canadians that October 16-23 is National Dental Hygiene Week. The purpose of this campaign is to remind Canadians that oral health is important. By improving our oral health we can improve our overall health.

This year's campaign focuses on teens and addresses issues such as smokeless tobacco, gum disease and general mouth care. Natural teeth are meant to last a lifetime and good home dental care can help teens and other Canadians reach this goal.

Dental hygienists are staging mall displays, visiting schools and community centres and working with local media to increase knowledge of oral health. Fact sheets focusing on teen oral health issues are also available.

The Canadian Dental Hygienists Association is to be congratulated for mounting a promotion which also highlights the role of dental hygienists in helping Canadians to achieve good oral health.

I am sure all members of the House congratulate the Canadian Dental Hygienists Association and wish them much success in this very important campaign."

CDHA Executive: Planning the Future And Helping Constituent Associations Meet Current Challenges

Meeting in Winnipeg to conduct Association planning provided a prime opportunity for CDHA's President, Maxine Borowko, to spend time with members of the Manitoba Dental Hygienists Association (MDHA) and provide them with more information about self-regulation. Maxine and the Registrar of the Alberta Dental Assistants Association, Aldine Walling, spent the better part of a day co-facilitating a self-regulation workshop to help MDHA members understand the implications of self-regulation and update them on the national perspective in this regard.

MDHA President, Nancy Hughes, says the workshop provided valuable information for those who attended. She believes

many of the province's dental hygienists do not fully understand the concept of self-regulation and it is important to provide additional opportunities for them to learn more about it. In an effort to reach more members, MDHA is planning to host another self-regulation workshop in the spring.

Activities undertaken by Executive during the planning session included: establishing the 1995 travel agenda for CDHA's Executive members, that is, developing a schedule of visits to ensure a representative of CDHA's Executive can meet with provincial executives and CDHA members at component association meetings; fine-tuning details related to the CDHA Endowment Fund (a fund that is adminis-

tered under the auspices of the Dentistry Canada Fund); reviewing details regarding CDHA's 6th Annual Professional Conference (Halifax — June 23-25); reviewing and recommending responses to international and national requests of CDHA; reviewing and coordinating CDHA council activities; planning for the Board's January Session to be held in Ottawa; reviewing outside documents of importance to CDHA, updating and prioritizing issues of importance to provincial associations and identifying their needs for CDHA support in addition to addressing general matters related to business and financial issues that are "part and parcel" of the management of a dynamic association.

Have an ethical problem? Don't know where the boundaries are?

Need help to make a decision?

CDHA Code of Ethics — Read it!

CDHA/ACFD Educators' Workshop Deemed a Success



Sheryl Feller (left) and Fern Hubbard-MacDonald (right) workshop facilitators.

Last October in Winnipeg, 29 people invested their time, expertise, intellectual energy and creativity while participating in a workshop which resulted in the first draft of revised Education Standards for Canadian dental hygienists.

Workshop participants included 24 dental hygienists from across Canada, Kerstin Ohrn, a special guest from Sweden, as well as representation from the Federation of Dental Registrars, the Canadian Dental Assistants' Association, the Commission on Dental Accreditation of Canada, Dental Hygiene

Licensing Authorities, the federal government's Internal Trade Department and the Education and Training Department of the Manitoba provincial government.

The government representatives were invited to provide the group with an understanding of how the newly enacted Federal/Provincial Trade Agreement's Chapter on Labour Mobility will impact on the profession. The two representatives were also able to comment on the standards from a consumer's perspective.

Fern Hubbard-MacDonald of British Columbia and Sheryl Feller of Manitoba are

working as the consultants for the project. Fern had prepared a draft document for the workshop and she and Sheryl worked as co-facilitators throughout the weekend.

The Education Standards document parallels the Structure, Process and Outcome format of the Practice Standards and includes both Competencies and Related Knowledge sections.

Anyone wishing to participate in the validation process for the standards, by reviewing the document, are asked to contact Sheryl Feller at (204) 736-4433.



CDHA/ACFD workshop participants completed first draft of revised Dental Hygiene Education Standards while in Winnipeg in October.

Alberta Dental Hygienists Association Hires Member Services Coordinator

Since becoming the regulatory body for dental hygienists practising in Alberta, by the proclamation of the Dental Disciplines Act in 1990, the Alberta Dental Hygienists Association (ADHA) has experienced significant change. The added responsibilities meant the ADHA Council had to review and revise its mission (to ensure it recognized its new responsibilities to the public). It also underwent changes that altered its Council and staff structures.

In July 1994, ADHA hired Josephine Juchli to serve as its Member Services Coordinator, a position it established to meet current and projected needs of the dental hygiene profession and ADHA membership.

Josephine holds a Diploma in Dental Hygiene and a Bachelor of Education degree

from the University of Alberta. She has practiced dental hygiene in numerous settings, including general family practice, fixed prosthodontics and periodontic specialty practice. As well, she taught dental hygiene students in the Division of Dental Hygiene, Faculty of Dentistry, University of Alberta program. She is an ADHA Past President and served as Chair of the 1988 CDHA National Conference.

In her role as Member Services Coordinator, Josephine reports to the Association's Executive Director and the ADHA Council. She helps to initiate, direct and implement Association policies relating to continuing education, advanced and special interest dental hygiene education and member communication. She will also assist ADHA's Registrar with the establishment,

maintenance and reporting of continuing education records when this becomes a mandatory requirement of licensure.



Errata

Marie Lochhead, ASc is the author of "The Efficacy of Electric-Powered Toothbrushes: A Literature Review" (Vol. 28 No 6). She holds an Associates in Science Degree with Honours (1981) from Onondaga Community College in Syracuse, New York.

BCDHA — Setting A New Stage for the Profession



Mary Ann Hayes,
BCDHA Executive Director

It's an exciting time to be a dental hygienist in British Columbia! The profession's profile is growing with the public, the government, and with other professions as it moves towards self-regulation and the establishment of the College of Dental Hygienists.

Recent legislative changes present unique challenges for the British Columbia Dental Hygienists Association as it switches its focus back to the business of a professional association and member services. The Association hired Mary Ann Hayes to serve as its Executive Director to support the Association's talented and committed Executive Council as it moves forward with its strategic plan. This article has been prepared by Mary Ann to help you better understand current changes in the dental hygiene profession in British Columbia.

The initial goal of BCDHA's strategic plan was to create an organizational structure that more closely reflected the dental hygiene profession's national association, CDHA. To accomplish this task, management consultant and dental hygienist, Sheryl Feller, facilitated a strategic planning session with the BCDHA Board of Directors to help them develop new goals and objectives, redefine the Association's structure and establish a Council structure that reflected CDHA's model.

In order to complete BCDHA's reorganization, the documentation supporting the organization was reworked to reflect its new image. This included rewriting the Constitution and Bylaws to create a document that parallels that of the CDHA and the development of a new Policy and Procedures Manual in a format that can be easily updated and will serve as a useful reference to Board members who are charged with the responsibility of carrying out the Association's duties.

The next critical step was to hear directly from the membership. Mary Ann is enthusiastic about the responses received as she and BCDHA President, Vicki Thompson conducted workshops with several component societies representing both urban and rural communities. The workshops provided an opportunity for both member and non-member hygienists to share their ideas

about the support they required from their Provincial Association, both personally and professionally. It will serve to provide a framework for the strategic planning session that will take place at the Association's next Board meeting. Mary Ann notes that the success of the workshops were, without a doubt, related to the open and honest participation of those in attendance.

Some of the main issues raised during the workshops included the need for the Association to provide:

- Information on national and international issues, latest regulatory, legal and ethical issues, and latest clinical and prevention approaches;
- Promotion of the profession to the general public, other professionals and the government;
- Continuing education courses that are current, accessible in all areas of the province, relevant to dental hygienists and affordable;
- Support for component societies by lobbying for alternate practice opportunities, approving study clubs and chapters, providing opportunities to meet with the Executive to air local issues;
- Representation to the College of Dental Hygienists to ensure standards of practice are maintained, protecting the dental hygienists' scope of practice and being the membership's voice to the College.



University of Alberta Faculty of Dentistry— Update

In January 1994, the Future Direction Steering Committee was established at the University of Alberta to respond to a motion put forth by the University's Administration to permanently close its Faculty of Dentistry. The Committee, composed of representatives of the Alberta Dental Hygienists Association, the Alberta Dental Association, Faculty of Dentistry representatives, U of A dental and dental hygiene students and the public, sought to ensure the delivery of dental and dental hygiene education at the University.

In June 1994, U of A's Board of Governors agreed it would further consider the proposal put forth by the Future Direction Steering Committee and a Dental Studies Task Force was established. The goal of this Task Force was to restructure and reorganize dental studies at the U of A. In essence, it was created to further develop the proposal set forth by the

Future Direction Steering Committee.

The Dental Studies Task Force, which is an advisory body to the U of A's Board of Governors, presented its Proposal for Restructuring and Reorganizing Dental Studies at the University of Alberta to the University's President in November. In closed meetings, the President and University Administrators have reviewed the document and made recommendations to the Board of Governors. The Board of Governors is currently assessing the Task Force's proposal to determine its feasibility, in economic and academic terms.

Implementation of a Bachelor of Science in Dental Hygiene and a degree completion program in dental hygiene are integral components of the Proposal. The BScDH would be structured as one prerequisite year (General

Science) plus three years Dental Hygiene. The prerequisite year would be designed to provide students with basic science preparation and a solid foundation for dental hygiene sciences. The focus of years two to four would be on the development of dental hygiene knowledge and skills. The education program proposed emphasizes interdisciplinary studies. These recommendations are currently before the University of Alberta's Administration in the task force's report.

In the meantime, the University has confirmed that dental and diploma dental hygiene students will be admitted into the Faculty of Dentistry in the fall of 1995. This will reduce pressure to make a hasty decision regarding the Task Force's proposal.

Thanks to Josephine Juchli of the ADHA for providing this update.

Ontario Dental Hygiene Educators Form New Association

On September 24, 1994, Kempenfelt Conference Center in Barrie, Ontario was the setting for the second meeting of the newly formed Dental Hygiene Educators Association of Ontario (DHEAO).

At the inaugural workshop, held April 6, 1994 more than 25 dental hygiene educators met to discuss mutual concerns about the impact of self-regulation on the future educational needs of dental hygienists in Ontario. This meeting set the stage for the establishment of a mission statement, goals and a vision for success of the organization. Members were charged with specific strategies that would be completed by, and reported on, at the September meeting.

More than 35 hygienists attended the September workshop. A formal structure was established for the Association and key issues were reviewed. Working in groups, members developed a mission statement and realistic goals and courses of action. A primary concern of DHEAO is the updating and enriching of the dental hygiene education curriculum. Discussion on this topic was lively with an excellent exchange of problems and solutions.

DHEAO members view themselves as advocates fostering innovation and excellence in education. The Association will also provide a structure for professional growth. Further meetings are planned for the spring of 1995.

CDHO Hires Registrar/Chief Administrative Officer

CDHA's Immediate Past President, Fran Richardson Cotton became Registrar/Chief Administrative Officer of the College of Dental Hygienists of Ontario earlier this year. The new challenge means a departure from her position as Chair, Health Sciences for the College of New Caledonia which she was appointed to in June 1994.



Fran Richardson Cotton, CDHO Registrar/Chief Administrative Officer

Fran earned her Diploma in Dental Hygiene from the University of Toronto in 1971. She received a Bachelor of Science in Dentistry (Dental Hygiene) from the University of Toronto in 1982 and a Masters of Education (Curriculum and Instruction) from the University of Regina in 1987. She is an active member of the Canadian Dental Hygienists Association, the International Federation of Dental Hygienists, the American Association of Dental Schools and

the American Dental Hygienists Association.

Fran brings a wealth of clinical, educational and administrative experience to her new position. She has worked as a dental hygienist in private practice in Ontario, British Columbia, Alberta and Texas and was an Assistant Professor of the Health Sciences/Dental Hygiene Program at Mid-

western State University in Wichita Falls, Texas from 1988 - 1990. From 1982 - 1988 she was Supervisor of the Dental Hygiene Program at the Saskatchewan Institute of Applied Science and Technology (SIAST). Prior to teaching in Saskatchewan she was the Teaching Master for Dental Programs at Cambrian College in Sudbury, Ontario (1975 - 1977). She has also taught at Georgian College in Orillia, Ontario.



College of Dental Hygienists of Ontario Promotes Dental Hygiene at the Ontario Hospital Association Conference

In keeping with the College of Dental Hygienists of Ontario's (CDHO) Mission Statement, "to develop, advocate and regulate safe, effective dental hygiene practice for the promotion of oral health and well-being of the public of Ontario", the CDHO participated in the Ontario Hospital Association Conference, held in November 1994 in Toronto.

The College was one of more than 270 exhibitors participating in the Ontario hospital conference. The event attracted approximately 8,000 participants, including hospital CEOs, department heads, trustees, senior managers and health professionals from various disciplines. During the confer-

ence, CDHO representatives met with a range of hospital professionals to share information about the role dental hygienists could play in health care reform in Ontario.

In addition, CDHO representatives exchanged information about access to oral hygiene services with representatives from many community agencies. While discussing issues with personnel from Comcare, Central Park Lodges, Providence Center and Interm, they learned that team members serving their clients include registered nurses, medical social workers, occupational therapists, respiratory technologists, personal care aides, companions, live-ins, homemakers and speech and

language pathologists. The need to include dental hygienists on this roster is apparent.

Experienced hospital dental hygienist, Dale Scanlan, participated on behalf of the College as a resource person at the CDHO booth. She was pleased by the many comments of support for the College's position on long term care.

"I feel that the CDHO definitely made an impact and sowed some seeds; time will be the best judge of the fruitfulness of such proactive exercises," Dale says of the experience.

Quality Assessment in Continuing Education: An Example of an Instrument Sharpening Workshop for Dental Hygienists

By/par:

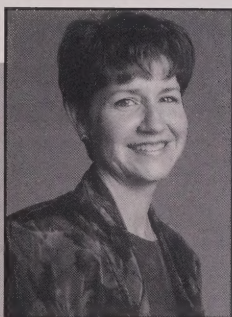
Nancy Keselyak, BSc DH, MA

Linda Maschak, Dip DH

L'évaluation de la qualité en matière de formation permanente: L'exemple d'un atelier sur l'affûtage des instruments en hygiène dentaire

Purpose

The purpose of this article is to illustrate a format for continuing education activities designed to assist the dental professional to strive for, and incorporate into their practice, quality assurance in client care. This type of continuing education activity focuses on helping participants to (a) identify their learning needs and (b) facilitate the development of an *action plan* which will lead to specific, realistic and practical changes in their daily practice.



NANCY KESELYAK, BSc DH, MA



LINDA MASCHAK, Dip DH

L'objectif

Le présent article a pour objet d'illustrer une forme d'activités de formation permanente mise au point pour aider les professionnels dentaires à toujours s'assurer de la qualité des soins qu'ils administrent à leur clientèle. Ce type d'activité cherche précisément à (a) aider les participants à cerner leurs besoins de formation et (b) à faciliter l'élaboration d'un plan d'action qui les amènera à modifier de façon précise, réaliste et pratique leur pratique quotidienne.

Introduction

Continuing education activities are frequently confined to the presentation of knowledge without providing assessment, planning, implementation, or evaluation opportunities for the participants. Malcolm Knowles¹ suggests that adults have been conditioned by their previous schooling to perceive the appropriate role of learner to be that of a dependent, more or less passive recipient of transmitted content. This presents an internal conflict for adult learners because they see themselves as self-directed in almost all other aspects of their lives. To become dependent on a teacher for learning again, is uncomfortable. Knowles calls for program designs that will help adults accept a new way of thinking about the role of the learner and develop new skills in self-directed learning.

Educational programs that provide opportunities for learners to diagnose their own learning needs reflect the principles of adult education² and recognize that adults are usually self-directing. In this process of self-evaluation, the role of the teacher is to help learners obtain evidence, for themselves, about the progress they are making toward their educational goals.

In addition to the literature on self-directed learning, studies regarding the transfer of learning and the maintenance of behaviour change indicate the desirability of building into the design of learning experiences, provisions for the learners to plan and even rehearse how they are going to apply their learning to their day-to-day lives.¹ This empha-

Introduction

La formation permanente se limite souvent à la présentation de nouvelles connaissances, sans offrir de possibilités aux participants en matière d'appréciation, de planification, d'application ou d'évaluation. Malcolm Knowles¹ suggère que leur formation scolaire antérieure a conditionné les adultes à percevoir le rôle de l'apprenant comme étant celui d'un récepteur dépendant et plus ou moins passif face aux données qui lui sont transmises. Ceci pose un conflit chez l'étudiant adulte qui s'estime autonome dans presque tous les autres aspects de sa vie. Se retrouver de nouveau dépendant du professeur pour apprendre le gêne. Knowles demande donc d'élaborer des programmes qui aideront l'adulte à accepter une nouvelle façon de voir le rôle de l'apprenant et à développer de nouvelles capacités en matière d'apprentissage autonome.

Les programmes de formation qui permettent à l'apprenant de cerner ses propres besoins d'apprentissage s'inspirent des principes de la formation permanente² et reconnaissent que l'adulte est ordinairement autonome. Dans ce processus d'auto-évaluation, l'enseignant aide l'apprenant à recueillir, pour lui-même, l'information quant à sa progression vers les buts qu'il s'est fixés en matière de formation.

Outre la documentation sur l'apprentissage autonome, les études concernant le transfert du savoir et le maintien des changements de comportement indiquent qu'il est souhaitable de prévoir, dans les exercices d'apprentissage, la possibilité pour l'étudiant de planifier la mise en

sis on the practical application of knowledge recognizes that adults engage in learning largely in response to pressures they feel from their current life situation. Adults tend to enter an educational activity in a problem-oriented frame of mind.² Therefore, programs need to provide activities through which problems can be defined, solutions can be identified, and new behaviours can be implemented.

The Canadian Dental Hygienists Association (CDHA) is committed to incorporating quality assurance activities into continuing education for dental hygienists through the continued development of its quality assurance workshop based on *The Clinical Practice Standards for Dental Hygienists in Canada*.³ This CDHA workshop, entitled "Taking Steps to Ensure Quality Dental Hygiene Care"⁴, provides an opportunity for dental hygienists to evaluate their own clinical practice and set goals for change. (It is currently under revision, however will soon again be available to all dental hygienists in Canada.) The CDHA Quality Assurance Workshop provides an excellent opportunity for dental hygienists to examine the overall practice standards of the profession. Taking this concept one step further, an instrument sharpening workshop was developed utilizing the principles of adult education and experiential learning.

This workshop, based on current literature pertaining to experiential learning, assists practitioners to identify needs, improve skills, and supports the integration of these refined skills into their daily dental hygiene practice. The workshop illustrates an educational framework that seeks to enhance quality assurance in patient care by incorporating quality assessment activities into continuing education activities for dental hygienists. Research in the field of knowledge acquisition suggests that what learners hear or view passively usually goes into short term memory and is frequently forgotten. Only when learners use the information in some interactive process does it move to the long term memory.^{5,6}

Workshop Framework:

The framework utilized several key components as follows: (see Figure 1).

Self-Analysis:

In a small group setting (approximately 8-12 participants and 2 facilitators), the program begins with a self-analysis of instrument sharpening knowledge and practices according to specific standards. This analysis provides a basis from which the participant identifies specific learning needs that perhaps were previously unknown to the individual.

Standards:

Standards are identified through information provided in current literature. The standards assist participants in measuring their present knowledge and/or skill level.

Target:

Independently, the participants select a goal, or target, for desired change based on their individual self-assessments.

Resource(s):

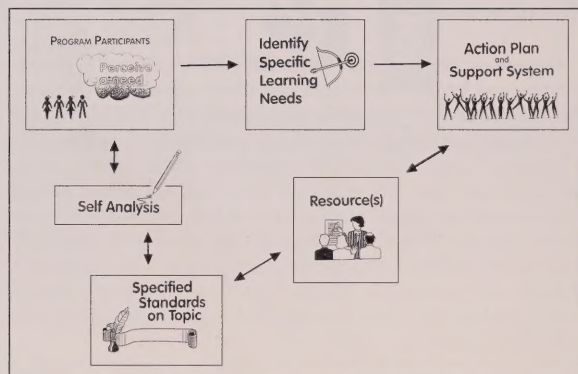
Utilizing data gathered from participants and current information on instrument sharpening, the facilitators address the topic through discussion, demonstration and hands-on experiences. The experiential format of this workshop provides an opportunity to develop, refine and integrate knowledge and clinical skills based on the identified standards.

pratique dans sa vie de tous les jours de ce qu'il aura appris, et même de s'y exercer¹. L'accent qu'on met sur l'application pratique du savoir vient du fait que l'adulte qui retourne aux études réagit dans une grande mesure aux pressions qu'il ressent dans sa vie courante. L'adulte a tendance à vouloir élargir ses connaissances avec l'intention de trouver des solutions aux problèmes². Les programmes de formation doivent donc offrir des activités qui permettront de définir les problèmes, de trouver les solutions et de mettre en pratique les nouveaux comportements.

L'Association canadienne des hygiénistes dentaires (ACHD) s'est engagée à inclure des activités d'assurance de la qualité dans la formation permanente des hygiénistes dentaires en cherchant constamment à parfaire son atelier sur l'assurance de la qualité à partir des Normes de pratique clinique des hygiénistes dentaires du Canada³. Cet atelier, qui porte sur les « Mesures pour assurer la qualité des soins d'hygiène dentaire », donne aux hygiénistes dentaires l'occasion d'évaluer leur propre travail en clinique et de se donner des objectifs d'amélioration. (Le programme est en voie de révision, mais il sera bientôt accessible aux hygiénistes dentaires du Canada.) L'Atelier de l'ACHD sur l'assurance de la qualité offre aux hygiénistes dentaires une excellente occasion de revoir l'ensemble des normes de pratique de leur profession. Approfondissant davantage cette notion, on a mis au point un atelier sur l'affûtage des instruments qui s'inspire des principes de la formation permanente et de l'apprentissage expérimental.

Cet atelier, qui s'appuie sur la documentation actuelle en la matière, a pour objet d'aider les praticiens à définir leurs besoins, à améliorer leurs capacités et à intégrer ces nouveaux raffinements dans la pratique quotidienne de l'hygiène dentaire. L'atelier met l'accent sur un cadre de formation qui cherche à améliorer l'assurance de la qualité dans le soin des patients, en intégrant des activités d'appréciation de la qualité dans la formation permanente des hygiénistes dentaires. La recherche dans le domaine de l'acquisition des connaissances suggère que ce que les apprenants entendent et regardent passivement se retrouve dans la mémoire à court terme et est souvent oublié. Ce n'est que lorsque les apprenants se servent de l'information dans des procédés interactifs que celle-ci passe dans la mémoire à long terme^{5,6}.

Figure 1



Action Plan:

Participants are assisted in developing individualized plans of action designed to help them incorporate the specific skills and knowledge required in their day-to-day clinical practice. Methods for monitoring and evaluating individual progress towards achieving their stated goal/target are planned as independent activities.

Support System(s):

The development of support systems within the group are encouraged. These support systems may be formed among participants whether they share the same workplace or not. Following the workshop, the facilitators are also available (via telephone) to assist participants with refining and successfully carrying out their individualized action plans.

Workshop Format:

Data were collected during two instrument sharpening workshops conducted in the Greater Vancouver and District area during September 1992. These workshops, entitled "Maintaining the Critical Edge: An Instrument Sharpening Workshop", were sponsored and developed by NAN-KES Partners in Education. Each workshop was conducted by two facilitators and involved nine dental hygienists in the first workshop (Group A) and thirteen in the second (Group B) for a total of twenty-two participants.

The workshops focused on providing the participants with information based on the Dental Hygiene Practice Model of assessing, planning, implementing and evaluation. The following goals were outlined:

1. Assess instrument design, sharpening devices and methodologies.
2. Improve ability to sharpen and recontour scaling and root planing instruments.
3. Evaluate effectiveness of sharpening procedures.
4. Recognize and correct common instrument sharpening problems.
5. Plan integration of new sharpening skills into clinical practice.

Pre-test and pre-assessment forms were distributed to the participants prior to the delivery of any instruction. The pre-test was administered first. This form collected demographic information identifying from where, and when, participants graduated and examined current theoretical knowledge. It also provided a mechanism for the authors to investigate whether or not relationships existed between either the year of graduation and current knowledge level, or the institution the participant graduated from and current knowledge level. Following an introduction to the workshop manual, a pre-assessment worksheet was distributed which assessed current practice behaviours. While participants completed the pre-assessment worksheet, the facilitators reviewed the pre-test form responses, looking for common needs as well as specific information that could be addressed and delivered during the workshop. Upon completion of the pre-assessment activity, one facilitator tabulated the responses while the other proceeded with a discussion on the differences between sharpening and recontouring. During a program break, the facilitators shared the pre-test/pre-assessment results and developed a plan to meet the participants' specific needs. Following further instruction, demonstration, and practise, the Pre-test was administered again, this time as a *post-test*. Action plans designed to facilitate changes in practice behaviours were also developed. In addition to the quantitative data gathered through the pre-test and pre-assessment forms, qualitative data, in the form of participants comments, were obtained on course evaluation forms and through informal verbal reports.

Results:

The year and school of graduation of the participants in each group are listed in Table I. In Group A, the graduation year ranged from 1977 to 1991 while in Group B, the range was from 1966 to 1992. Group A participants (shown in parentheses) were graduates of dental hygiene programs offered in various "regions" of Canada: British Columbia (3); Prairies (4); and Ontario (1). One participant graduated outside of Canada. In Group B, the aforementioned "regions" were represented as follows: British Columbia (6); Prairies (3); Ontario (2); and Atlantic (2).

Table I

Participant Demographics

Group and Number of participants	Grad Year	School of Graduation
A (1)	1977	St. Clair College, Ontario
A (1)	1983	University of Manitoba (UM)
A (2)	1984	University of Alberta (UA)
A (2)	1986	University of British Columbia (UBC)
A (1)	1989	Vancouver Community College
A (1)	1989	University of Saskatchewan
A (1)	1991	Oregon Institute of Technology
B (1)	1966	Dalhousie University (DU)
B (1)	1969	UM
B (1)	1977	UBC
B (2)	1983	UBC
B (1)	1983	UA
B (1)	1983	WIAAS (Saskatchewan)
B (1)	1984	UBC
B (1)	1984	DU
B (1)	1988	Algonquin College, Ontario
B (2)	1989	Vancouver Community College
B (1)	1992	Munro Community College

Overall, the data indicated that the majority of participants graduated in 1983 and 1984 (41%), followed by the years 1986 to 1989 (32%). Each remaining decade (1960's, 1970's, and 1990's) involved only 9% of the participants. When the region of graduation was compared, most participants were found to be from British Columbia (41%), followed by the Prairies (32%), Ontario (13.5%), Atlantic (9%), and U.S.A. (4.5%).

Before conducting the workshop, the authors were concerned that the majority of the participants might have received their dental hygiene education in British Columbia, making the findings more specific to British Columbia. Although the demographic data collected revealed participation from across Canada, most participants (64%) graduated in the 1980's from an institution in Western Canada; of which only 36% were from British Columbia. While greater representation from Western Canada was expected due to the location of the course, it was interesting to see that each region of Canada was represented.

As stated previously, the authors explored two demographic issues utilizing the pre-test. The first issue was an examination of the relationship between the participants' year of graduation and pre-workshop knowledge regarding instrument sharpening. The second issue examined the relationship between the institution of graduation and pre-workshop knowledge. While no overall correlation could be found, it was interesting to note that only two participants (UBC '86 and UM '69) could identify the correct internal angle around the toe of a curette (Question 2). Data analysis also revealed that 54% of Group B were able to recognize the fact that different sharpening techniques were not required for Curvettes and Mini 5 Gracey instruments, compared to 22% of Group A.

From the data collected in the pre-test (Table II), it is clear that not all workshop participants were familiar with the optimal internal angles of curettes and sickle scalers (Questions 1, 2). However, the optimal shape of curettes, when viewing down on the face of the blade, was easily identified (Question 3). The optimal shape of sickle scalers was not

Table II

Pre-test Results

Questions:	Correctly answered:	Incorrectly answered:
1. Optimal internal angles of sickles	7	15
2. Optimal internal angles of curettes	2	20
3. Original shape of curettes	21	1
4. Original shape of sickles	14	8
5. (deleted from study due to ambiguity)		
6. Curette recognition	9	13
7. Characteristics of instruments	12	10
8. Characteristics of stones	6	16
9. Evidence of wire edges	3	19
10. Three methods to evaluate sharpness	7	15

as favourably chosen (Question 4) and some curettes, recently available on the market, were not readily recognized or used by these practising hygienists (Question 6). Important characteristics of instrument composition and stones could not be clearly identified (Questions 7,8) and the rationale and method for the avoidance of wire edges was not readily known (Question 9). Furthermore, three methods used to evaluate sharpness could not be listed (Question 10).

All participants were able to identify all of the correct answers of this pre/post-test at the end of the workshop.

The data collected from the pre-assessment forms (Table III) indicate that the majority of the workshop participants utilize an India/Arkansas stone (Question 1) and the stationary stone/moving instrument method of sharpening (Question 2). Only three participants were consistently satisfied with their sharpening results (Question 3). Most of these clinicians utilized a variety of instruments in their practices (Question 4) and initial sharpening and sharpening frequency was quite varied (Question 5). For the workshop to be a success for the participants, the goal or "target" most frequently stated was to become more effective in their sharpening and recontouring skills (Question 6).

Information gleaned from a review of the pre-test and the pre-assessment forms enabled the facilitators to assist the participants in identifying their specific learning needs more effectively and to create plans of action that would achieve their goal or target. As a result of the workshop, the most frequent and specific changes that participants planned to make in their practices were to: "work on the proper stone angle", "change stone presently used", "allow more time for sharpening", "sharpen around toes", "keep lateral edges parallel" and "spend more time sharpening during root planing procedures".

Qualitative data from the course evaluation forms expressed praise for the one-on-one *individualized* instruction, the hands-on experiences, and small group setting. Participants also indicated that they enjoyed the individualized instruction offered to the group and the prac-

Table III

Pre-Assessment Worksheet Results:

Questions:	Responses: (no. in parentheses)
1. Type of stone used for sharpening? ceramic stone India/Arkansas stone	 (4) (18)
2. Method of sharpening? stationary stone method stationary instrument method	 (15) (7)
3. Satisfaction with sharpening efforts? yes sometimes no (various reasons were given for the above answers)	 (3) (10) (9)
4. Types of instruments used in practice? sickles only universals & graceys universals, graceys & sickles universals, graceys & files universals, graceys, sickles & files graceys & sickles	 (1) (1) (3) (2) (13) (2)
5. When instruments are sharpened? <i>Initial Sharpening</i> prior to sterilization and appt. neither before sterilization nor appt. prior to appointment only <i>Sharpening Frequency During Appointment</i> once 2 - 3 times 4+ times as required seldom never, take new instrument from drawer no response to question	 (1) (2) (19) (8) (2) (3) (3) (2) (1) (3)
6. Desired outcome from workshop? increase consistency more effective scaling & rootplaning more confidence more effective sharpening & recontouring decrease re-ordering work with partner (share instruments)	 (4) (4) (3) (18) (4) (2)

tical help available during the workshop. Some noted that it was comforting to learn that "everyone has similar problems" with instrument sharpening. Overall comments such as "one of the best continuing education courses I've been at", "enjoyable", "well planned", "A-1", "excellent instruction", "excellent presentation", and "very useful course" were frequently written on the evaluation forms. Also suggestions that would help the facilitators to improve future workshop sessions included providing "even more individualized help" and maintaining the small group sessions.

Discussion:

The authors recognize that there are several limitations to the utilization of the data collected from the pre-test and pre-assessment results. The workshop participants had "self-selected" themselves to attend the continuing education course and did not represent a large enough or true cross-section of dental hygienists. In some cases, participants may actually have had the working knowledge of instrument sharpening, but could not correctly answer a pen and paper question and/or may not have been familiar with all the terminology (e.g., stationary stone/moving instrument method). However, these limitations could be adjusted in further studies.

Initial informal reports from participants indicate that the instrument sharpening workshop was successful in assisting the workshop participants to identify their needs, improve their skills, and support the integration of these refined skills into their daily dental hygiene practice. Since instrument sharpening was addressed in a problem-oriented manner, the participants were encouraged to develop their own concrete strategies for implementing change. The program design remained consistent with the principles of adult education. It was very different from a limited interaction, subject-oriented lecture, which does not individualize needs or provide support for desired changes.

The experiential format of this workshop provides an opportunity to develop, refine and integrate knowledge and clinical skills based on identified standards. The new experiences gained from the workshop then become part of the participant's repertoire of previous experiences. This is important because adults rely heavily upon previous experience to deal with daily problems.⁷ For example, during this workshop, a dental hygienist who has successfully identified a poorly contoured instrument as a potential hazard will have increased confidence and experience to identify successfully, other instruments that may be hazardous in a clinical practice setting.

This new program format is not essential for all continuing education courses, but, depending upon the objectives and expected outcomes, could supplement and augment existing programs designed to upgrade clinical skills. The overall response from participants was very positive. Participants felt that the instrument sharpening workshop successfully enabled them to attain all the specified workshop goals. Informal feedback indicated that the workshop participants were able to incorporate the desired changes into their clinical practices. They became familiar with quality assessment as a key factor in quality assurance activities. Comments such as "best continuing education course I've been at" and "very useful course" indicated that a great deal of personal satisfaction resulted from this type of workshop framework. With the completion of additional workshops, the authors will continue to add to their data base and will further evaluate the ongoing success of this program format.

Conclusions:

A continuing education workshop format, supported by current literature on experiential learning, can assist practitioners to identify needs, to improve skills, and to support the integration of these refined skills into their daily dental hygiene practice. This particular instrument sharpening workshop also confirmed participants' perceived need for continuing education in this area of clinical practice. Overall, workshop participants wanted to become more confident, consistent and effective in sharpening and recontouring their instruments, which would increase their effectiveness in scaling and root planing; decrease the need to order new instruments; and increase their ability to share instruments with other practitioners. Using these goals as a point of reference, this workshop format helped the participants identify the

specific skills required to achieve the desired individual changes. From this identification, individual action plans were developed which also included strategic monitoring and evaluation components.

Continuing education programs that utilize the framework outlined in this article are able to involve practitioners experientially in quality assessment and quality assurance activities. For educators who are serious about the implications for change in the daily practice of dental hygiene and the learning outcomes of their adult participants, this kind of continuing education activity has much to offer. For the participants of continuing education programs, becoming an active learner can lead to greater personal satisfaction with professional development activities. Overall, the authors believe that the importance of this type of program format will gain greater recognition and acceptance as dental hygienists assume more responsibility for regulating their profession to ensure continued competence and protection of the public interest.

References:

1. Knowles, M. The Modern Practice of Adult Education: From Pedagogy to Andragogy (revised and updated). Chicago: Follet Publishing Company, 1980.
2. Brundage, D. and MacKeracher, D. Adult Learning Principles and Their Application to Program Planning. Ministry of Education, Ontario, 1980.
3. Health and Welfare Canada. Clinical Practice Standards for Dental Hygienists in Canada, Part II: Report of the Working Group on the Practice of Dental Hygiene. Minister of Supply and Services Canada, 1988.
4. Canadian Dental Hygienists Association. C.D.H.A. Quality Assurance Workshop: Taking Steps to Ensure Quality Dental Hygiene Care. Ottawa, 1990.
5. Eisner, J. The Impact of Information Technology on Dental Continuing Education. (Report on The Canadian Dental Association, Teaching Conference on Continuing Education). Montreal: Canadian Dental Association, 1988.
6. Keselyak, Nancy. A Critical Analysis of Continuing Education for Dental Hygienists in British Columbia. Master of Arts Thesis, Simon Fraser University, 1990, p. 128.
7. Cervero, R. Effective Continuing Education for Professionals. Jossey Bass Publishers. San Francisco, 1988.

Nancy Keselyak received her dental hygiene diploma from the University of Maryland in 1977 and her Master of Arts (Education) degree in 1990 from Simon Fraser University. She is currently working in a periodontal practice and teaching at the Faculty of Dentistry at the University of British Columbia. Formerly an instructor in the Dental Hygiene Program, Nancy continues to teach occasionally at Vancouver Community College. In 1990, Nancy founded NAN-KES: Partners in Education, an educational consulting group offering complete continuing education services to members of the dental profession. She is currently the Continuing Education Coordinator for the Canadian Dental Hygienists Association.

Linda Maschak received her diploma in dental hygiene from the University of British Columbia in 1974 and has continued her education in the areas of instruction and nutrition, receiving her British Columbia Provincial Instructor Diploma in 1992. Her clinical experience includes both periodontal and general practice. She is currently an instructor in the Department of Dental Hygiene at Vancouver Community College teaching preventive dentistry, nutrition and clinical practice. Linda has also facilitated numerous continuing education workshops focusing on instrument sharpening, treatment planning and performance logic.

Applied Ethics: Voicing Our Values

based on a presentation by Gary Chiodo, DMD

prepared by: Dianne Landry, Dip DH, Dip DN, BA, BV/Ted

Editor's note: This article discusses the remaining three of the five most common ethical dilemmas experienced by Dental Hygienists as reported in a survey of the American Dental Hygienists Association conducted by Dr. Gary Chiodo. Because of the similarities between dental hygiene practice in North America, these ethical dilemmas are also reflective of Canadian dental hygiene practice. The information is timely and valuable, so for these reasons we are featuring the remaining portion of Dr. Chiodo's presentation. Two of the ethical dilemmas relate to clinical practice and the third, while more philosophically based, nevertheless addresses a current health care issue of importance to Canadian dental hygienists — **access to care**.

An issue that poses an ethical dilemma common to both Canadian and American dental hygienists is the experienced restriction in one's ability to provide dental hygiene care because of the requirement to practice under the direct supervision of a dentist. Although differences exist, both the U.S. and Canada place various restrictions upon the scope of practice for dental hygienists and these restrictions result in an unfair and unnecessary burden on both the provider and the public. **The ethical issue here is one of justice according to its elementary definition: How do we provide the greatest good for the greatest number?**

Certainly, lack of access to adequate health care persists for millions and confronts all health care professionals. Governments are also concerned about spiralling health care costs. In the face of health care costs that continue to rise faster than the rates of inflation; of a rapidly expanding, aging population; of persons with AIDS who continue to be added to our populations at the rate of approximately 260 per day in the U.S. and about half that rate in Canada and who require approximately \$119,000.00 worth of health care from diagnosis to death; in the face of these and many other factors contributing to soaring health care costs, many of our citizens are finding it more difficult than ever to access health care. Oral health care is no exception to the access and cost problems and all health care providers have an ethical responsibility, to society at large, to improve the cost effectiveness of our health care delivery.

At the same time, dentistry has led the way in reducing health care costs through primary prevention. Interestingly, topical and systemic fluorides, oral prophylaxes, patient education, pit and fissure sealants, topical antimicrobials, diet and nutrition counselling, — **ARE ALL DENTAL HYGIENIST DELIVERED, PRIMARY PREVENTIVE MEASURES.**

Just as important, early diagnosis of dental diseases by the dental hygienist — yes, I just used the “**D**” WORD, diagnosis, and “dental hygienist” in the same sentence — early diagnosis is crucial for effective primary prevention. We are long overdue for recognizing that the dental hygienist represents a type of specialized health care provider

who currently is in great demand. *That is to say, dental hygienists are the experts in primary prevention.*

Today's dental patients can be saved from serious health problems and the health care system can save millions of dollars if we provide efficient, unrestricted access to dental hygienists. Primary prevention is undisputedly, the most cost effective method for any type of health care delivery and it produces the greatest level of patient satisfaction. Our patients not only avoid destructive dental problems, they experience a greatly increased quality of life when they are afforded ready access to primary prevention. Most significantly, in some patients, those with AIDS for example, both the **quantity** and the **quality** of life are increased by having unobstructed access to a dental hygienist.

I would suggest that this is indeed an ethical dilemma of some consequence. Many patients today need your services far more than the dentists', for there is but one true expert in primary prevention in the dental office — the dental hygienist. While the dentist can extract teeth for those patients who had no access to dental care, make their crowns, dentures, and partials, and do their root canals, you could have prevented their ever needing any dentist's services, for **YOU ARE THE SPECIALISTS IN PRIMARY PREVENTION**. You can save most patients from an uncertain and undesirable dental fate and can save the health care system millions of dollars while doing so.

Thus, we return to the simple ethics theme of access. As health care professionals, we have an unequivocal ethical obligation to strive individually and collectively to do that which is beneficent and nonmaleficent for our patients and to do that which is just for the public and the health care system. I believe that individually, most dentists and dental hygienists endeavor to do just that for their patients.

...there is but one true expert in primary prevention in the dental office — the dental hygienist.

However, the ethical dilemma here is quite clear and it transcends the conventional interpretation of this issue — that is, *that as educated licensed professionals, dental hygienists should be entitled to the same rights and privileges as are other similarly educated licensed professionals*. While that assertion is quite correct, the greater ethical and public health issue is that an educated, licensed health care professional should be allowed, indeed, encouraged, to provide the greatest good for the greatest number. *Mandating dental hygiene practice to within the confines of the dentist's office and placing unrealistic restrictions on the scope of dental hygiene practice will never permit achievement of this ethical goal.*

It is long past time for all allied health care professionals to work together toward helping achieve access for those most in need, to unify in their efforts to contain spiralling health care costs while improving the level of care available to the underserved and to voice their values and affirm that restricted access to primary preventive oral health care is no longer acceptable. If organized dentistry does not share those values; if organized dentistry continues to impede access, we may need to voice our values to the public and to our legislators to ensure the nation's AIDS patients, the growing number of dentate elders, the underinsured, the working poor, children, and many others are to achieve access. Thus, this ethical dilemma is not so much a chairside problem as it is a global challenge. The CDHA as well as the ADHA must continue in their efforts to work toward fair and equitable access for all patients and toward a more fair scope of practice for all dental hygienists.

The second most frequently encountered ethical dilemma from the U.S. Survey relates to observed situations in which failure to refer a patient to a specialist resulted in an overall decline in patient dental health.

In this dilemma, patients may be harmed due to either the action, or inaction, on the part of other providers. If patients in a practice are consistently declining in oral health because specialist treatment is never being sought out, then the evidence of gross and continual faulty treatment is clear and the activation of a peer review process is necessary. An excerpt from the ADA Code of Ethics succinctly expresses the obligation to refer patients to specialists: "[providers] shall be obliged to seek consultation, if possible, whenever the welfare of patients will be safeguarded or advanced by utilizing those who have special skills, knowledge, and experience."

Mr. B and His Periodontitis

You have been practising dental hygiene in a prevention oriented general dental practice for five years. One of your patients, Mr. B, is a 53 year-old man who is a facilities planner for the city. When Mr. B first came to the practice, two years ago, he had generalized moderate periodontitis. His oral hygiene was relatively good. During the course of your initial treatment, which required four appointments, you discussed the etiology of periodontitis and the disease process. You instructed Mr. B in oral hygiene care, including sulcular brushing and the use of floss. When you reevaluated Mr. B at each recall visit, it was apparent that his oral hygiene and his periodontal condition had not improved. At his last appointment, you recorded several 5 mm to 7 mm pocket depths that were not previously present. You discussed this with the dentist who decided to refer Mr. B to a periodontist for evaluation and treatment. Mr. B saw the periodontist who prescribed conservative treatment in general with two areas of surgery.

Mr. B said that he would consider this advice but did not return to either practice until his six month recall visit with you, today. His periodontitis has progressed to some extent and you advise him of this. The dentist expressed significant dissatisfaction and concern that Mr. B did not follow through with the periodontal treatment plan. Mr. B reports that he understands the prognosis of his condition and has thought it over and really does not feel that periodontal treatment is preferable to eventually losing his teeth. He requests that he continue to see you on six-month recall for routine scaling and prophylaxis and that you and the dentist stop lecturing him about his teeth.

Again, this case is taken from a real dental hygiene practice — a patient would clearly benefit from some increased level of care — be it specialist referral, surgery, increased frequency of recall for dental hygiene visits, or, most common of all, increased level of personal involvement in plaque control — home care. How often do you encounter patients who half-listen to your advice with one ear while glancing at their watches and squirming to escape your operatory? How often do you encounter patients who swear that they are brushing three times per day and flossing twice per day while their gingiva is inflamed and bleeding, every tooth is covered with plaque, and subgingival calculus has reformed within six months? You have all seen these patients with tissues that have suffered through the past six months of total neglect. You suspect that their flossing frequency may be less than stated. You are tempted to ask which end of the brush they are using for their claimed thrice daily oral hygiene rituals — but you do not express this burning question. In short, how often do you encounter these patients who, after a period of time, demonstrate to you that their teeth seem to be more important to you than they are to them?

It is long past time for all allied health care professionals to work together toward helping achieve access for those most in need. . .

What are the ethical issues in these situations and how should we approach them? How do you voice your values when patients are unable to share your values?

First, the primary ethical issues are very clearly those of *informed consent* and *respect for autonomy*. All patients who have capacity to consent are autonomous individuals — they have the right to decide what will and will not be done to them. Nonetheless, in the health care environment, the procedures, the materials and devices, the expected outcomes, and the possible complications are all foreign to most patients. They are not truly autonomous in their health care decisions unless we facilitate that autonomy. Informed consent is the process through which providers facilitate the patient's autonomy. We do not and cannot treat patients without their informed consent to that treatment.

Now, consider the applied part of facilitating patient autonomy. A process of obtaining informed consent in practice is often abbreviated PARQ, P(procedure), A(alternatives), R(risk), Q(questions).

After discussing with the patient, the diagnosis and the nature of the disease, we explain the treatment **procedure** that is normally utilized to treat that disease. This is followed by a discussion of other treatment **alternatives** that may be used. The alternative part of the discussion must always include a discussion of the alternative of doing nothing at all — after all, this is a choice that is open to any competent patient. The **risks** of the recommended treatment as well as those of any alternative — including the risks of doing nothing — next must be disclosed to patients. This risk discussion should include mention of those risks that are significant both in terms of probability and magnitude. It need not and cannot include every possible risk. For example, the risk of death due to anaphylaxis from local anesthetic is of great magnitude but of very small probability. We not only need not disclose this risk to patients, it would be unethical to do so as it would serve to confuse and distract patients making informed choices. Throughout this discussion with patients, we answer their **questions**, and, elicit questions by asking questions of our own to check for understanding.

Now, let's apply this PARQ procedure to our patient in the above case. You have diagnosed this patient's periodontal condition and have observed it deteriorate over time. **You, the dentist, and the periodontist have all diagnosed periodontal disease that is significant but that would respond to treatment.**

The reality of practice is that patients come to us with values, beliefs, lifestyles, and behaviors that often are very different from ours.

To make certain that his treatment choice is informed, you will, once more, review with him his diagnosis and what that means. You will then review the periodontal treatment (P) that would give him the best chance to retain his teeth, explaining that such treatment is not 100% successful and that there are some unpleasant side-effects, such as transient discomfort and sensitivity. You also would explain that following such surgery, he would need to maintain the tissues through a more rigorous home care regimen. You would explain the benefits and risks of non-surgical periodontal therapy (A), of the treatment he is requesting, and of no treatment at all. Questioning (Q) him to ensure that he is aware that the fastest rate of tooth loss will occur if he selects either routine prophylaxis every six months or if he decides upon no treatment, will enable you to document that he understands the risks.

Having done all this, and having documented the PARQ in the patient's chart, you may now ethically accept this patient's autonomous, informed choice and provide the level of care he is requesting. In this situation, you have clearly voiced your values, however, the patient has also voiced his and it has become apparent that the two are at variance. This should surprise no one. There is no tenet in health care ethics that says you must accept or agree with your patients' values. If, after thoroughly explaining the procedure, alternatives, and risks, patients continue to consider non-ideal treatment as the only desirable treatment, it is quite likely that they will never view oral health care from the dental hygienist's vantage point.

However, as long as patients' requests do not subject them to direct, avoidable harms, their well-informed, autonomous wishes usually should be honored.

The reality of practice is that patients come to us with values, beliefs, lifestyles, and behaviors that often are very different from ours. Our ethical obligation is to treat them with the same degree of care, concern, and compassion as we would treat our own family members. We have no right to judge them. However, if the neglectful patient in the present case presented with an advanced and hopeless condition and requested that you provide care that you know to be futile, you would have no ethical obligation to do so. Patients who request futile care should be sensitively advised of the uselessness of such treatment and informed as to why it will not be provided. These patients should not be abandoned. They should be informed that they may continue to receive any emergency or effective care at your office or may be referred to other providers if they request such a change.

This brings us to the #1 ethical issue from the U.S. Survey. Over two-thirds of the respondents in this study reported that the most common ethical dilemma they encounter in practice is the lack of standard infection control procedures.

This ethical dilemma is not an ethical dilemma at all, **it is a legal issue.** In both the United States and in Canada, we have established standards for acceptable infection control within dental offices. Practising below these standards is a violation of the law and of professionally agreed upon principles. Substandard infection control practices are, therefore, malpractice; they are unprofessional and illegal; perhaps more to the point, they are just plain stupid.

The ethical response for the dental hygienist or dental assistant or anyone else who observes such violations is very clear. First, make the dentist aware of the substandard practice, second, if your complaint is ignored and the situation is not rectified within a reasonable period of time, the situation must be reported to any and all appropriate agencies.

Mr. H's Secret

Your patient, Mr. H, is a 35 year-old married male. You have treated Mr. and Mrs. H for the past three years. On reviewing Mr. H's medical history today, he tells you that he has had a weight loss of 20 pounds over the past three months. He is not on a diet. On examining Mr. H's mouth, you notice severe gingivitis in spite of his usual good home care. In addition, there is a whitish, non-removable, hyperkeratotic lesion along the left lateral border of his tongue. Mr. H also has several areas of yellow to white plaques that are easily removed. You question Mr. H at length about these areas and about other significant changes in his physical health. You explain that the lesion on his tongue strongly resembles hairy leukoplakia, and that the removable plaques resemble oral candidiasis. These two lesions, along with the rapid deterioration of his periodontal health indicate significant systemic illness, including the possibility of HIV infection.

As you explain all of this to Mr. H, he becomes visibly upset. Finally, he tells you that he has not been able to discuss his condition with anyone because he is so frightened. He reports that he has had high-risk behavior for HIV infection and that he was anonymously tested. He knows that he is HIV positive. He requests that you not tell anyone else, including his wife, because he is still not emotionally prepared to deal with the situation.

This case does not present a situation of improper infection control practices, however, it does present the pathogen which precipitated all of the discussions on infectious diseases in the dental office and precipitated the revised infection control standards we now have. Everyone is aware that HIV — AIDS — is the reason that infection control has evolved to the current level. **It shouldn't be.** Hepatitis B for which we have an effective vaccine, continues to occupationally infect about 6 to 7 thousand U.S. Health care workers per year and kills about 250 of them annually. Hepatitis C has been documented in two New York studies to be an occupational risk for dental health care workers with general dentists carrying the virus at seven times the prevalence of the general population and with oral surgeons carrying the virus at 66 times the prevalence of the general population. TB is rising at an alarming rate, and, again, occupational transmission to dental health care workers has been documented for both ordinary TB and for the more lethal MDR TB. In spite of these infectious disease statistics, health care workers still tend to focus only on AIDS which by now has become larger than life.

This case presents an HIV-related ethical dilemma that usually precipitates a strong, gut-level response in most health care workers. Again, this case is a true case that occurred in the practice of a real dental hygienist.

This case brings together several ethical issues. We must consider the ethical issues of patient autonomy and limits on that autonomy; *when infringement of confidentiality is justified; what is beneficent and nonmaleficent for both the patient and for a third-party — the patient's wife —; and how justice may be secured without indiscriminately violating the patient's wishes.* Legal issues are also involved whenever the dilemma deals with HIV-related information and confidentiality.

How may you voice your values in this situation? While the situation presented may not be a common occurrence in the practices of most dental hygienists, it is a relatively common occurrence in some medical and nursing practices. It is also common in public health practices. Thus, as you might suspect, these other health care professionals have thought through the situation and have suggested several innovative approaches that achieve the greatest good while inflicting the least harm. The one approach I like best has been provided by the American Medical Association (AMA) and suggests a 3-step protocol.

In this protocol the first step is for the provider to counsel the patient that the at risk third-party needs to know their risk and that they will learn this risk. The patient has some control over how that third-party finds out. The best choice is for the patient himself to tell his wife and this should be done in a counselling environment. If the patient refuses to do this, it is permissible to allow him some reasonable amount of time to think it over, making certain that he is aware that the question is not if his wife will find out but how his wife will find out. Second, if on revisiting the issue in a day or two, the patient is steadfast in his refusal to tell his wife, the provider should tell the patient that the county, state or other appropriate governmental health division will be notified and they will decide on the appropriate approach. Third, in the event that the governmental agency refuses to accept the case, the health care worker herself is then ethically responsible to notify the third-party.

This is, of course, the most uncomfortable choice for any health care worker. However, it is clear that, in a situation such as the present case, notification of the unaware third-party is not merely ethically permissible, it is ethically mandatory. It also is quite wise to contact one's practice attorney prior to making such a revelation to a third-party against a patient's expressed wishes.

We continue to be faced with a significant majority of health care workers who refuse to accept that they have a legal, ethical duty to treat those among us who are in most need. Anyone who has treated HIV positive patients — anyone who has kept current in their professional reading and continuing education — knows that persons with AIDS need more treatment, not less. Oral health care increases not only the person with AIDS quality of life, the current evidence suggests that it increases the patient's *quantity* of life. Volumes have been published in the dental and dental hygiene literature on treatment needs of HIV positive patients. No dental hygienist has occupationally acquired HIV — that places the observed risk at 0 whereas the theoretical risk is somewhere around 1 in 2 million. On the other hand, her risk of death from simply driving to the office each day is about 1 in 4,000.

Nearly two-thirds of respondents, in surveys conducted in 1991 and 1993, indicated that they were not only ethical providers and willingly accepted their duty as health care providers to treat those most in need without personally judging them, but that they were well-educated providers who recognized the great need for oral health care that HIV positive patients have. These are the health care professionals who are voicing the values of the profession, dental hygiene, and who are voicing the values of the health care professions united. We must never forget that when we voice our values as providers, we are voicing them as representatives of our profession and as representatives of the entire profession of health care. 

PerioREPORTS

Bimonthly publication which summarizes periodontal research of specific interest to clinicians. Easy to read format keeps you up to date on the latest research findings. Journals reviewed for **Perio REPORTS** include:

Journal of Periodontology
Journal of Clinical Periodontology
Journal of Periodontal Research
Journal of Dental Research
Periodontal Abstracts
Quintessence International
J of Periodontics and Restorative Dent
JADA, JADHA
and many more

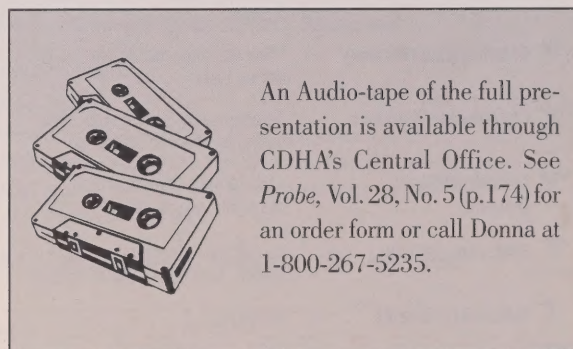
☐ Please send sample issue for my review

☐ \$48 one-year
☐ \$84 two-year

Name _____
Address _____

City _____
Prov _____ Postal Code _____

Mail to: Perio REPORTS
Box 52090, 311 - 16th Ave. NE
Calgary, Alberta, T2E 8K9



An Audio-tape of the full presentation is available through CDHA's Central Office. See *Probe*, Vol. 28, No. 5 (p.174) for an order form or call Donna at 1-800-267-5235.

RESOURCE CENTRE — NEW ACQUISITION

Book References

Canada's Health System: Bordering on the Possible
Jane Fulton, PhD
Published by Faulkner and Gray, 1993
(One available)
ISBN #1-881393-08-9

Oral side-effects of the most frequently prescribed drugs

Authors: *Smith, Robt. G., RPh and Burtner, A. Paul, DMD*
Special Care in Dentistry Vol 14 No 3 1994

Due to technological advances, an aging population, and increased insurance coverage for medications, from 1970-1990 the per capita number of prescriptions increased 36%.

With an increase in the use of medications, associated oral symptoms such as xerostomia, stomatitis and altered taste, also increased. This report was written to familiarize the clinician with the frequently reported oral side-effects of commonly prescribed medications.

The authors identified the 200 most frequently prescribed medications through information provided by IMS America's National Prescription Audit. A literature search provided further information identifying the oral side-effects.

The following is a selected list of some commonly prescribed medications and their oral side-effects.

Medications	Reported Adverse-effects	Medications	Reported Adverse-effects
▼ Acetaminophen/Codeine	Xerostomia, taste alteration, mouth sores	▼ Lorazepam (Ativan)	Xerostomia, stomatitis, swollen tongue, bitter/metallic taste, increased salivation, coated tongue, sore gums
▼ Albuteral (Ventolin/Proventil)	Xerostomia, unusual taste, tooth discolouration	▼ Lovastatin (Mevacor)	Xerostomia, stomatitis, altered taste
▼ Alprazolam (Xanax)	Xerostomia, sore gums, salivation, bitter taste, swollen tongue	▼ Metoprolol (Lopressor)	Xerostomia
▼ Captopril (Capoten)	Xerostomia, glossitis, decrease in taste	▼ Nadolol (Corguard)	Xerostomia
▼ Chlorhexidine (Peridex)	Teeth staining, calculus formation, altered taste	▼ Nicotine Polacrilex (Nicorette)	Xerostomia, stomatitis, glossitis, gingivitis, traumatic mucosal injury, jaw ache, altered taste, tingling teeth/mouth
▼ Clonazepam (Klonopin)	Xerostomia, coated tongue, sore gums, decrease in salivation	▼ Nifedipine (Procardia)	Xerostomia, gingival hyperplasia, altered taste
▼ Cyclobenzaprine (Flexoril)	Xerostomia, unpleasant taste, stomatitis, tongue discoloration	▼ Nitroglycerin (Nitrostat)	Xerostomia, sublingual burning
▼ Diazepam (Valium)	Xerostomia, bitter taste, swollen tongue, sore gums, coated tongue	▼ Penicillin	Xerostomia, glossitis, stomatitis, altered taste, sore mouth/tongue black hairy tongue
▼ Diflusalin (Dolobid)	Stomatitis	▼ Prednisone	Xerostomia, unpleasant taste
▼ Diltiazem (Cardizem)	Xerostomia, gingival hyperplasia, altered taste	▼ Propoxyphen N/Acetamin. (Darvocet)	Xerostomia, taste alterations, mouth sores
▼ Elanapril (Vasotec)	Xerostomia, glossitis, stomatitis, altered taste, stomatitis	▼ Propranolol (Inderal)	Xerostomia, unpleasant taste, tongue discolouration
▼ Fluoxetine (Prozac)	Xerostomia, glossitis, aphthous gingivitis, tongue edema, tongue discoloration	▼ Tamoxifen (Nolvadex)	Distaste for food
▼ Furosemide (Lasix)	Xerostomia	▼ Temazepam (Restoril)	Xerostomia
▼ Ibuprofen	Xerostomia, gingival ulcers	▼ Terfenadine (Seldane)	Xerostomia
▼ Isosorbide (Isordil)	Xerostomia	▼ Tetracycline	Glossitis, stomatitis, teeth discolouration, black hairy tongue
▼ Levonorgestrel (Triphasil-28) Norgestrel (Ovral-28)	Gingivitis and dry socket	▼ Warfarin (Coumadin)	Ulcers, bleeding gums, sore mouth



CDHA 6th Annual Professional Conference

Halifax, Nova Scotia

June 23-25, 1995

Delegate Registration Form

CDHA Member / ADHA Member

* Full Registration: on or before May 1, 1995 \$215.00 (GST incl.)
after May 1, 1995 \$265.00 (GST incl.)

**Full registration includes access to Friday reception, scientific sessions, exhibits, breaks, luncheons and Saturday evening social.*

** Daily Registration: on or before May 1, 1995 \$100.00 (GST incl.) Please indicate day(s)
after May 1, 1995 \$130.00 (GST incl.) _____ Fri. _____ Sat. _____ Sat.

***Daily registration fees include the following: Friday: scientific, break, evening reception.
Saturday: scientific, lunch, exhibits (does not include Sat. evening social). Sunday: breakfast, scientific, Awards Luncheon.*

Please contact your provincial licensing body for applicable continuing education points.

Allied Health Professionals/Public

Full Registration: *\$400.00 (GST incl.)
*\$265.00 if you are a member of your National Professional Association

Daily Registration: \$150.00 (GST incl.)

Students (Full-Time Dental Hygiene Only)

Full Registration: Free for lectures only (does not include socials or meals)
\$100.00 (GST incl.) includes luncheons, breaks and reception (not Saturday social)
Daily Registration: Free for lectures only
\$40.00 (GST incl.) includes lunches and breaks (not Saturday social or Friday Reception)

Social Tickets – Pier 22: \$35.00 extra for all registrations where social is not included.

Early-bird draw

Registrations received prior to May 1, 1995
are eligible to win free registration.

Cancellation Policy

If cancellation notice is received in writing prior to
May 1, 1995, a refund, less \$25.00 administration fee, will be
issued. After May 1, 1995, a 50% refund will be issued.
No refunds after June 1, 1995.

Complete and send form to: CDHA Conference, 96 Centrepointhe Dr., Nepean, ON, K2G 6B1

Cheque ☐ (made payable to CDHA) Amount _____
or Visa Number _____ Expiry date _____ Amount _____
(*Mastercard/Amex are not accepted*)
Name _____ CDHA ID# _____
Address _____
City _____ Prov. _____ Postal Code _____
Telephone: Res () _____ Bus () _____

Please indicate the following:

Extra tickets for Pier 22 Social, Saturday, June 24th @ \$35.00 ea. *Note ticket to this social is included with full registration.
(please include payment with registration fee). _____

Vegetarian Yes ☐ No ☐ Please indicate any food allergies: _____

Hotel Information: CDHA has reserved a room block at the Sheraton Halifax for conference participants. However,
hotel accommodation arrangements are the responsibility of the registrant. Call: Sheraton Halifax,
1919 Upper Water Street, Halifax, NS Tel: (902) 421-1700, Fax: (902) 422-5805
Rate: \$117.00 plus taxes (Single or Double occupancy).

Cut-off for reservations at conference rate is May 13, 1995.

Preliminary Program

June 23 - 25, 1995



Canadian Dental Hygienists Association

HALIFAX

Sixth Annual Professional Conference
For more information call 1-800-267-5235

Friday, June 23

- 1:00 - 1:30 Conference Opening
Opening Remarks/Greetings
- 1:30 - 3:15 **Jane Fulton, PhD**
- 3:15 - 3:30 Break
- 3:30 - 5:00 **1 of 3 choices!**
Choong Foong, BSc (Hon) PhD on
Medical Histories & Pharmacology
or
JoAnn Gurenlian, RDH, PhD on Lasers
or
Chris Gallant, MSc, MD, FRCP(C) on
Dental Hygiene Dermatology Issues
- Evening: President's Reception

Pat Grant, Dip DH, BA
Bob Konopasky, PhD, C.Psych.
Marilyn MacKay-Lyons, MSc (PT), BSc (PT), Dip (PT)
moderated by **Lynda McKeown Mickelson, RDH, HBA** of the College of Dental Hygienists of Ontario

or
Michael Vallis, MA, PhD on Stress Management

Break

2 choices
***Burglind Gregg, Dip DH, BA, LLB** on the Legalities of Recordkeeping
or
Kimberly Krust-Bray, RDH, MS on The Role of Local Drug Delivery and the Changing Role of Ultrasonics

Sponsored by: **DENSPLY CANADA**

Evening Social Event (including a Meal and Entertainment (More details to follow in future issues of *Probe*))

Saturday, June 24

- 7:30 - 8:30 Continental Breakfast (tentative)
- 8:30 - 10:00 **1 of 2 choices**
Barbara Harsanyi, BA, DDS, MS FRCD(C) on Oral Pathology
or
***JoAnn Gurenlian, RDH, PhD** on Diagnostic Decision-Making
- 10:00 - 11:30 Free Paper Presentations and
Commercial Exhibits
- 11:30 - 2:00 Lunch
- 2:00 - 3:45 ***Panel Discussion on Self-Regulation** featuring: **Brenda Walker, RDH** of the Alberta Dental Hygienists Assn

Sunday, June 25

- 7:30 - 8:30 Continental Breakfast
- 8:30 - 10:00 **Dan Boland, MSc (PT), MCPA** and **Shirley McCarthy, BSc (OT), Reg (NS)** on Preventing & Managing Injuries in the Workplace
- and
10:00 - 11:30 **Christine Robb, Dip DH, BA** on Ethics and Infection Control
or
8:30 - 11:00 **Kimberly Krust-Bray, RDH, MS** on Periodontal Debridement
- Sponsored by: **DENSPLY CANADA**
- 12:00 - 2:00 Awards Brunch
- * to be simultaneously translated*

Here's a glimpse of some of the Educational Opportunities awaiting you next June in Halifax — read *PROBE* regularly for more details. Refer to Vol. 28 No. 6 for others.

Friday, June 23

This is not the time to leap on a horse and ride off in all directions!

Jane Fulton, PhD
Ottawa, Ontario

Join Jane Fulton for a glimpse of the future and the new role of dental hygienists. Discover the opportunities for change and the barriers against it. And leave this session with a better knowledge and understanding of how health care will change.

1:30 - 3:15 PM



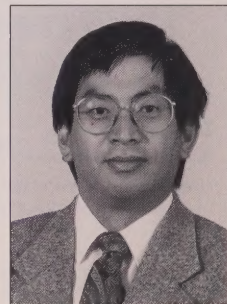
Friday, June 23

Pharmaceutics, Patients and the Practitioners

Choong Foong, BSc, PhD
Halifax, Nova Scotia

How may a patient's medical history, dental history and social habits influence your treatment plan? How would you obtain information regarding drugs/medications? Where is this information stored? Are there alternatives for patients who exhibit allergic reactions to dental drugs? Are your patients taking medications that may interact with dental drugs? This presentation will use a case-centered approach to review the inter-relationship between medical history, dental history and social habits and their potential influences on patient management. Participants will learn how to access and extract relevant drug information. Current trends in local anaesthetics, analgesics and antibiotics will also be discussed.

3:30 - 5:00 PM



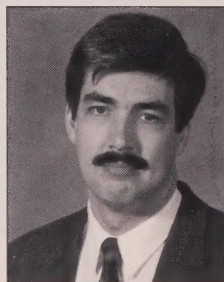
Friday, June 23

Dental Hygiene Dermatology Issues

Chris Gallant, MD, MSc, FRCP(C)
Dartmouth, Nova Scotia

Skin disease is the single most common type of work-related illness. The prevalence of work-related skin disease is particularly high in health care professions. In the workplace, our skin is exposed to a wide variety of different chemicals, traumas and pathogens that can cause significant morbidity if appropriate occupational hygiene and skin care precautions are not observed. During this presentation, Dr. Gallant will focus on the causes and solutions to dermatological concerns shared by dental hygienists.

3:30 - 5:00 PM



Remember Exhibits will be open
Saturday June 24 from 10:00 AM to 2:00 PM.
This presents an excellent opportunity
to discover the latest products
available to dental hygienists.

Saturday, June 24

8:30 - 10:00 AM

The Public, The Practitioner, The Profession and Oral Malnancies

Barbara Harsanyi, DDS, MS, FRCD(C)
Halifax, Nova Scotia

A recent newspaper article alerted the public to dentists' and physicians' lack of effectiveness in dealing with cancer of the mouth in its early stages. The article was based on a scientific paper that was published in the Journal of the Canadian Dental Association (Lovas et al. J. Canadian Dental Assoc 59(11):935-938 Nov 1993). Dr. Harsanyi will explore the implications of this research in relation to the dental hygienist's role in the early detection and management of oral precancer and cancer. The session will include a knowledge-based review of oral lesions which turned out to be oral precancer or cancer, as well as common oral lesions which are neither precancerous or cancerous. A case management exercise and a brief discussion (with audience participation) on what the dental hygienists can, and cannot, do in this area of clinical practice will also be part of the presentation.

Delegates planning to attend this session are encouraged to read the Lovas article cited.

Saturday, June 24

4:00 - 5:00 PM

Aspects of Record Keeping

Burglind Blei Gregg, Dip DH, LLB
Halifax, Nova Scotia

This lecture-style presentation is designed to alert the professional dental hygienist to the legalities of this aspect of one's practice. Whether records are being documented for clinical, financial, quality control or other purposes, these files must meet specific requirements. The presentation will include an overview of legislative and other record keeping requirements, for example, those set by the Canadian General Standards Board. The presentation will focus on the importance of accurate record keeping as a means to providing good oral health services as well as for other purposes such as publication, legal defence and teaching.



Class Reunions at the CDHA Conference

Calling all Dalhousie University School of Dental Hygiene Graduates...

CDHA's Annual Professional Conference presents a prime opportunity to re-acquaint yourself with former classmates and share new experiences. In an effort to help our members make the most of this opportunity we are coordinating an evening of Reunions. Please contact Kim Haslam at (902) 455-6464 for details.

PIER 22
DOCKSIDE, HALIFAX

CDHA's Annual Professional Conference
More Than a
Learning Experience!

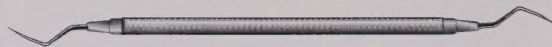
At this year's CDHA Annual Professional Conference we want you to *experience* the Atlantic — Full Conference Registration ensures your participation in the Saturday Evening Social, an integral part of this event. This year's Local Organizing Committee is organizing a unique evening in one of Halifax's finest facilities. Join us at *Pier 22* for an unforgettable evening featuring good food, good

company and a few other surprises!

Pier 22 is located next to *Pier 21* (which seems logical), but there is more to this site than meets the eye. There is historical significance to the site of this year's conference social. *Pier 21* was the key entry point for individuals emigrating to Canada during the 1930s. Perhaps your ancestors or friends arrived in Canada at this dock many years ago.



Next issue we will highlight The Panel Discussion on Self-Regulation



These dilemmas are designed to explore the ethical issues of practice, they are quite separate and apart from jurisprudence. A minimum level of conduct is achieved by jurisprudence (law), the highest levels of conduct

are attained largely through understanding and voluntary adherence to a professional standard or Code of Ethics.

The Dilemma

A regular patient presented to the office for a hygiene recall appointment which was treatment planned for scaling and root planing. As for all previous appointments in which invasive procedures were planned, she required antibiotic prophylaxis (mitral valve prolapse). On this specific day, however, she had forgotten to take her initial dose.

On checking with the patient, the hygienist was surprised to learn this fact since this patient had always remembered in the past. Before proceeding, the hygienist consulted with the dentist to discuss dismissing the patient and rescheduling the appointment. The dentist said, "Go ahead with the cleaning, but try not to go too far subgingivally and try to keep the bleeding to a minimum!". He proceeded to justify this by saying that the patient induces bleeding every time she brushes her teeth, so a "delicate" cleaning shouldn't harm the patient. The patient was advised of the possible risks and agreed to allow the appointment to proceed.

The hygienist followed the dentist's orders (placing the responsibility on the dentist) but did not feel right about her actions. The dentist stopped in to the operator at the end of the appointment to talk to the patient about the situation. Although the hygienist knew she had not done a thorough job, the patient was charged full price. The patient paid in full and left the office happy that her teeth had been cleaned.

Although the hygienist had always documented appointments in which the patient *had been premedicated*, she did not document that the patient *had not been premedicated* for this appointment.

1. Gather the Facts

- The people involved in this dilemma: the patient, the hygienist, the dentist.
- The patient was a regular patient of this dental clinic. In the past, she was always premedicated prior to the conduct of any invasive procedures, due to her heart condition (MVP).
- On this particular day she presented to the clinic for a scheduled dental hygiene appointment but indicated she had forgotten to take the initial antibiotic prophylactic dose.
- The hygienist, upon learning this information, approached the dentist to suggest she dismiss the patient for the day and reschedule another appointment for a cleaning.
- The dentist told the hygienist to "Go ahead with the appointment, but try not to go too far subgingivally and try to keep the bleeding to a minimum!"
- The dentist likened a "delicate" cleaning to just brushing one's own teeth.
- The hygienist explained the risks involved to the patient, but the patient said it was okay anyway.
- The hygienist put the responsibility on the dentist and followed his orders to do a "delicate" cleaning. However, she did not feel right about her actions (especially since she knew she did not do a thorough prophylaxis and the patient was still charged full price).
- The patient was happy that her teeth were cleaned and paid her bill in full before leaving the office.
- The fact that the patient *had not been premedicated* was **not** noted in the chart's progress notes.

2. Identify the Relevant Values and Principles (from CDHA Code of Ethics)

Principle 1: Respect for Persons. A dental hygienist has an obligation to treat clients with respect for their individual needs and values.

The patient's health was at risk in this situation but she had been informed of the risks by the hygienist. Nonetheless, the hygienist felt uncomfortable carrying out the treatment and, consequently, she did

not do a thorough job (for the patient's benefit, she thought) because she was afraid to provoke bleeding. The patient gave her the "okay" to proceed, but the hygienist was still at odds with the situation and the dentist's assessment and directive (example of **ethical distress**).

Principle 3: Veracity and Informed Consent. Based upon respect for clients and regard for their right to control their own care, dental hygienists must respect the right of choice held by clients.

One may question whether or not the patient had been adequately informed of the risks involved in invasive dental procedures and infective endocarditis in individuals with mitral valve prolapse since the dentist only spoke to the patient *after* the appointment was over. Although the hygienist did speak to the patient regarding this issue, it is the responsibility of the individual who prescribed antibiotics in the first place, (in this case, the dentist), to sit down and talk to the patient prior to the commencement of the procedure.

Principle 4: Beneficence and Quality Assurance. The dental hygienist is obligated to provide competent care ("doing of good") as currently described in The Clinical Practice Standards for Canadian Dental Hygienists in Canada.

Firstly, it was not in the best interests of the patient to have treatment done on that day. Secondly, even though the patient gave her consent, the quality of the treatment was admittedly not up to standard due to a situation of ethical distress on the part of the hygienist. The patient required a thorough scaling but did not receive it.

Principle 5: Justice. "...What is deserved..." The dental hygienist, as a member of the dental profession, is obligated to take steps to ensure that the client receives competent ethical care.

The patient deserves (1) complete periodontal therapy, (2) to be correctly informed of all risks and benefits associated with treatment with or without antibiotic prophylaxis, (3) to be charged fairly, and (4) to be treated with her best interests in the forefront. In this situation, although the patient deserved quality treatment, the hygienist thought she was doing what was best for the patient by avoiding anything that would

provoke bleeding and, consequently, she did not provide a thorough cleaning. The patient should have been charged accordingly.

Conflicting Values and Principles:

"Respect for Persons" is in conflict with "Beneficence" since the patient gave her consent for the cleaning to take place even though she was not premedicated as recommended by the American Heart Association (AHA).

"Beneficence" is in conflict with "Justice" since the patient deserves to have a thorough cleaning (which usually provokes some bleeding) but the hygienist thought it was in the best interest of the patient not to scale subgingivally. Subgingival scaling is, of course, more beneficial to the oral health of a patient, but in this instance it was more beneficial to the patient for the hygienist to not go subgingivally. The patient did not deserve to pay the full price, however, even though the hygienist was acting with the patient's best interests in mind.

3. Explore the Options

1. Tell the patient that the appointment will have to be rescheduled because she forgot to take her initial antibiotic prophylactic dose. Explain the risks associated with performing invasive dental procedure in individuals who are recommended by the AHA to have coverage and point out that it is the *dentist's preference* (even though the dentist said to 'go ahead') not to treat her until she is premedicated (as in her previous appointments). That is to say, lie for the benefit of the patient's health. *(This is ethically wrong.)*
2. Proceed with the appointment as scheduled without telling the patient the risks involved in not having the proper antibiotic coverage. *(This is ethically wrong.)*
3. Explain the problem to the patient and have the patient decide what they would like to do. If the patient decides to go ahead with the cleaning, you should decide to do one of the following:
 - A. Compromise the quality of the cleaning by avoiding all subgingival regions and have the patient pay in full anyway. *(Unethical response since quality is being compromised.)*
 - B. Do a full mouth scaling and root planing as if she were any other healthy patient and charge her appropriately. *(Unethical to proceed in this manner given the circumstances.)*

C. Do a very light cleaning, both supra- and subgingivally (at very least, de-plaquing subgingivally), taking care not to provoke profuse bleeding. Charge patient normally or at a lower fee. *(Unethical to compromise quality of care provided.)*

4. Discuss with the patient the risks involved and advise the dentist that you have decided to reschedule the patient because she has not taken her medication. If the dentist insists you proceed, challenge the opinion, risk being reprimanded for not following the order and refuse to treat the patient until properly medicated (as in previous appointments).

4. Choose an Option

The best option would be to explain the risks to the patient, ask her to reschedule the appointment and let the dentist know how you have addressed the situation. Although Options 1 and 4 both reach the same end point, Option 1 compromises your integrity and is inappropriate. Option 4 is the most appropriate response because it allows you to accept responsibility for your actions. The decision "to treat or not to treat" in this situation is within the scope of the dental hygienist's responsibilities and should be addressed accordingly. Option 4 allows you to assume responsibility for responding to the dilemma in an ethical manner, it is the best solution.

Option 2 offers nothing of benefit to the patient and disregards her well-being. Option 3 does offer an explanation and a decision on the part of the patient to either continue or cancel the appointment. However, if she did agree to go ahead, options A and C do not address the patient's need for complete treatment and, in effect, seem to suggest just *going through the motions* of a cleaning in order to get the money. The need to provide quality service is not addressed. Option B again conflicts with "Beneficence" even though consent to treat was given.

5. Implement Your Choice

It is easy to say Option 4 is the best solution to the dilemma, but as the saying goes, "Easier said than done!" The hygienist wanted to refuse the treatment of this patient but did not feel free to make an independent decision. Could you, and more importantly, would you? Something to think about!



PERIO POWERDONTICS™
EMPOWERING HYGIENE DEVELOPMENT

TEL: (416) 218-5575

One of the Nation's Leaders in Hygiene Development

TRANSFORM HYGIENE PERFORMANCE IN YOUR DENTAL PRACTICE

Start the process now with:

- Customized Soft Tissue Management Programs Implemented into your Practice with One-on-One Training
- Excellence in Diagnosing and Performing Periodontal Therapeutics of the 1990's
- Professional One-on-One Training in Advanced Clinical Skill Refinement
- Positioning Leading Edge Hygiene Technologies into Practice (i.e. Chemical Irrigation, Piezo Scaling, etc.)
- Motivated Team Players, and Increased Patient Acceptance through Empowering your Communication Skills.



PERIO POWERDONTICS™
Post Graduate Hygiene Education
Something For Every Hygienist

SELF-ASSESSMENT TEST

1. A mother telephones a dental office stating that her 4-year old, who weighs 29 pounds, has just swallowed about 2 ounces (59 ml) of Fluorigard Dental Rinse (.05% sodium fluoride). The child has ingested (1) amount of sodium fluoride and the treatment consists of (2).
 - a) (1) 30 mg and (2) induce vomiting
 - b) (1) 15 mg and (2) admit to hospital
 - c) (1) 13 mg and (2) administer calcium-containing agents
 - d) (1) 13 mg and (2) put the child to bed
2. You are successful as a dental educator if the patient
 - a) gains more knowledge about home and professional care.
 - b) visits the dentist every six months.
 - c) demonstrates proper brushing and flossing techniques.
 - d) takes appropriate action to improve and maintain oral health.
3. How do most adult patients respond to the threat that unless they become more conscientious about performing oral hygiene procedures they will lose their teeth?
 - a) It usually produces the desired behavioural change.
 - b) They respond only if the threat comes from a dentist.
 - c) Most adults feel secure enough that this threat has little lasting effect on their behaviour.
 - d) This is an excellent way to bring about behavioural changes in eventual loss of their teeth.
4. A mean PLI score of 2.8 for a population of schoolchildren indicates that the examiners most likely found within the study group, that the children have
 - a) An abundance of soft deposits.
 - b) A slight film of plaque detected by running the probe along tooth surfaces.
 - c) No plaque.
 - d) Conditions difficult to determine.
5. What does not apply to the Non-Specific Plaque Hypothesis?
 - a) The more bacteria, the more disease occurrence.
 - b) Remove specific bacteria, decreases the disease occurrence.
 - c) The host response affects the degree of disease occurrence.
 - d) Bacterial end-products from the entire plaque flora cause periodontal infections.
6. Since each host is able to tolerate the presence of some residual calculus and periodontal healing can still occur,
 - a) the hygienist should not be concerned about leaving calculus on the dentition even though it harbours toxins.
 - b) the hygienist's primary focus should be on a complete rubber cup prophylaxis.
 - c) the hygienist should try to remove the calculus to the best of his/her ability because calculus complicates the patient's ability to control plaque and infection
 - d) the hygienist does not need to reassess her calculus removal.

Are the following statements true or false?

7. Clinical trials have shown waxed floss to be superior in removing plaque than is unwaxed floss.
8. From day 4 to 7 in plaque development, spirochetes and vibrios mainly predominate in plaque.
9. Remember that asking questions never changes attitudes as effectively as making statements when discussing oral hygiene habits.
10. The growing body of literature suggests that a rubber cup prophylaxis should be a standard procedure.

11. It is assumed that a small amount (2 g) of additional sugar is a negligible addition to gum, and that the continued salivary stimulation, when the sugar has been chewed, serves to neutralize the previously low plaque pH.
12. It is the amount of sugar ingested rather than the frequency of between-meal snacking that is directly related to caries development.
13. Lipopolysaccharide endotoxins usually exist within cementum.
14. Hypoplasia is characterized by the quality of enamel being affected.
15. The largest component of plaque is water.
16. It is the disruption of plaque composition that prevents disease rather than the degree of plaque removal.

Thanks to Donna Pegg, Dip DH, Teacher and Clinical Instructor, Dental Department, Durham College, Oshawa, ON

Answers:

1. c)	2. d)	3. c)
4. a)	5. b)	6. c)
7. F	8. F	9. F
10. F	11. T	12. F
13. F	14. F	15. T
16. T		

AUSTRALIA DOWN UNDER STUDY TOUR MAY 1995

Australian Personnel Placement Service & Study Tours

50 Kensington Road, Rose Park South Australia 5067

Phone 011 618 331 3711 Fax 011 618 331 3569

Refer Nov/Dec issue

Calendar

		SPONSOR	LOCATION	FOR INFO CALL
January 1995				
28	Periodontal Management Program for Today's Dental Practice — Patricia Sterner	North Toronto Dental Hygienists Component Society/ODHA	Toronto North	(800) 315-6342
February				
1	Professional and Ethical Liability — Brian Curial	Southern Alberta Dental Hygienists Society	Foothills Hospital, Calgary, AB	Barbara at (403) 284-0060
4	Head and Neck Inspection and Oral Exam — Joseph Natiella, DDS, PhD, FRCD(C)	The James Sims Institute for Continuing Dental Education	Niagara Falls, ON	(905) 735-2211 ext. 7704
8	Periodontal Therapy Review — Heather Blondin	Sudbury & District Dental Hygienists Society	Sudbury, ON (Cambridge College)	(705) 522-2808
8	Back Care for the Dental Hygienist — Dr. Garth Annisette	Windsor-Essex Dental Hygienists Society	Windsor, ON	(519) 326-6040
15	Cosmetic Soft Tissue Grafting and Guided Tissue Regeneration — Paul Martin, DMD, Dip Perio.	Ottawa Dental Hygienists Society	Ottawa, ON	
25	Medical History: Assessing the Risks of Treatment — Eunice Edgington	Manitoba Dental Hygienists Association	Winnipeg, MB	(204) 789-3331
March				
3	Infection Control in the Dental Office — Lawrence Yanover, DDS, PhD, FRCD(C)	The James Sims Institute for Continuing Dental Education	Kitchener, ON	(905) 735-2211 ext. 7704
4	Making a Difference, as an Individual and Professional — Nancy Majeski, RDH	The James Sims Institute for Continuing Dental Education	Hamilton, ON	(905) 735-2211 ext. 7704
4	The Practical Application of the Carbon Dioxide Laser in Restorative Dentistry — Dr. Cary Ganz	University of Manitoba, Faculty of Dentistry	Winnipeg, MB	(204) 789-3331
7	Sexual Harassment: A Pervasive Societal Issue — Shirley Voyna-Wilson	Southern Alberta Dental Hygienists Society	Calgary, AB	(403) 284-0060
8-12	American Association of Dental Research (AADR) Annual Conference	American Association of Dental Research	San Antonio, Texas	(202) 898-1050
18	Introduction to Dental Implants — Leanne Carlson-Mann	Saskatchewan Dental Hygienists Association	Regina, SK (Wascana Institute)	(306) 775-1390
25	No Records — No Defense — Evie Jesin	Algoma Dental Hygienists Component Society/ODHA	Sault Ste. Marie, ON (Quality Inn)	(800) 315-6342
25	Assertiveness Training — Judith Cheesbrough	Saskatchewan Dental Assistants Association	Saskatoon, SK (Holiday Inn)	(306) 747-3504
28	Information Sharing Session, CDHA/CDHO/ODHA	Ottawa Dental Hygienists Society	Ottawa, ON (Chateau Laurier)	(800) 315-6342
April				
1	AIDS and Your Dental Patient — Dr. Susan Sutherland — Dr. Allan Harris	Hamilton Dental Hygienists Component Society/ODHA	Hamilton, ON (Venture Inn)	(800) 315-6342
5	A Broker's Presentation of Disability Insurance Choices — Nancy McKenzie	Southern Alberta Dental Hygienists Society	Calgary, AB	(403) 284-0060
8	Making A Difference — Nancy Majeski	Nipissing Dental Hygienists Component Society/ODHA	North Bay, ON	(800) 315-6342
8	Infection Control — Mr. David Marks — Dr. Lenny Arenson	Ottawa Dental Hygienists Component Society/ODHA	Ottawa, ON (Chateau Laurier)	(800) 315-6342

Elements of Dental Materials

For Dental Hygienists and Dental Assistants
 Ralph W. Phillips, MS, DSc (deceased)

B. Kenneth Moore, PhD

Fifth edition

W.B. Saunders Company;

A Division of Harcourt Brace & Company

The Curtis Centre

Independence Square West

Philadelphia, Pennsylvania 19106

1994, indexed, 311 pages

Reviewed by:

Dianne Landry, Dip DH, Dip DN, BA, BVTEd.

The practice of Dentistry has seen remarkable changes since the 4th edition of the book was published in 1984. This edition strives to include information about new materials and delivery systems and to show how changes in dental practice have influenced material choices and handling. The author states that the original objectives of the previous texts have not been altered. The goal is still to provide dental hygienists and dental assistants with a reference book that will provide a basic understanding of the theory of material science, as well as the practical applications in the selection and handling of various materials currently used in dentistry. This should enable the allied dental health professional to adapt the knowledge of the basic science and behaviour of existing materials to the new materials and techniques that are rapidly evolving.

The author includes materials currently accepted in dental practice as well as opinions about the future of some of the newer materials and techniques. Several chapters discuss concerns about occupational safety, protection of the environment, disposal of hazardous waste, and the transmission of infectious diseases.

The basic science material in the first four chapters remains unchanged. Chapter five discusses the new dental gypsum products. Chapters six, seven and eight introduce and discuss the concepts and requirements of dental impression materials. Information about the new automixing cartridge systems and visible light-cure impression materials is included. In Chapter nine, the basic concepts of polymer chemistry have been rewritten for easier understanding. The uses of dental polymers is discussed in reference to all prosthodontic applications. Chapter ten is devoted to direct filling restorative resins, including a classification system of the composition and properties of each type in a handy table format. Major attention is given to visible light-activated composite resins, the clinical applications of posterior resin material, and the use of resins as veneering materials and inlays.

Chapter eleven, twelve and thirteen, covering the principles of metallurgy, have been severely edited for easier reading. Chapters fourteen and fifteen discuss the microstructure, properties

and manipulation of dental amalgam, with an emphasis on the issues of the safety of dental amalgam and the hazards of mercury exposure to both the client and the dental office staff. Chapters sixteen through nineteen cover metal alloys and other materials used in dental castings. A new chapter twenty, recognizing Dental Ceramics as a distinct group in view of its growing application in aesthetic dentistry, discusses new materials and systems including the computer-aided design and manufacturing (CAD-CAM). Chapters twenty-one and twenty-two relate to the use of dental cements as restorative materials, liners, luting agents and bases. Information about glass ionomer and resin cements receive greater attention. Chapter twenty-three is new and discusses the increasingly expanding field of dental implants. The last two chapters covering abrasive, cutting, polishing and miscellaneous materials have been updated and edited.

Many new figures, which include the wearing of gloves when appropriate, have been added. There is an extensive use of lists and/or tables which compare the properties, composition and uses of similar materials. Also, review questions on the most salient points of the chapter are included at the end of each chapter. Students will find this useful for review and organization of the material. Every effort has been made to make the text more readable in order to facilitate the study and understanding of dental materials.

The increased awareness and knowledge of the consumer about the potential health hazards of materials and the demands for "aesthetic" dentistry requires that the allied dental health worker be knowledgeable and thus better able to assist the client in making informed decisions about their dental health. This text adequately and succinctly fulfills that requirement for both the student and the practitioner.

Second Opinion

Michael Rachlis and Carol Kushner

First Edition

Harper Collins Publishers Ltd, Toronto, ON

Copyright 1989, indexed, 333 pages

Reviewed by: H. Catherine Thom, Dip DH, MA
 Professor, Algonquin College of Applied Arts & Technology

The sub-title of this book, "What's wrong with Canada's Health Care System and how to fix it", capsulates its contents. The forward, written by The Honourable Monique Bégin, former Minister of Health and Welfare, endorses the authors' qualifications to critique Canada's Health Care System by pointing out that Dr. Rachlis was one of the first physicians to organize public support in defense of the system through the Medical Reform Group he helped found. Her statement "I wish I had written myself" is testimony to the book's credibility.

No topic can be more controversial than public health and safety. Rachlis and Kushner tackle

issues head on with information, logic and discussion of viable alternatives to the existing system. They point out that our system emphasizes technical disease treatment rather than focusing on the more fundamental social issues which influence health promotion and maintenance.

The first chapter blueprints the elements of the "great deception" of our current system namely: the misconception that high quality care cannot be economical; the weakness of a publicly funded system run by private providers; supplier induced demand for consumer services; the appalling lack of planning and direction for allocation of resources in the provision of health care services; barriers to required reform of the system; failure to do adequate scientific investigation of efficacy of routinely used treatments; the realization that our system does not address "health care" but rather "sickness treatment" and a description of the victims of the system caused by inadequate attention to social problems which lead to ill health. Each of these issues is investigated in turn. Research of government documents, studies, reports and hundreds of interviews with knowledgeable participants in all aspects of health care and its regulation, support the points made.

Chapters are devoted to the following topics: the escalating costs of health care (disease treatment) due to an ever increasing oversupply of health care providers (relative to population growth) coupled with a system based on supplier-created demand for services and discussion of the fact that few treatments currently in use have been investigated using the sound research principles of randomized clinical trials so that the relative effectiveness of alternate regimes are known. They examine the trade-offs between "high tech" medicine to help a relatively small number of people versus better social programs to fight poverty, ignorance, malnutrition, domestic violence and poor health care practices which are the major causes of physical and psychological illness.

Once the issues are thoroughly aired, the authors then devote the last chapters in the book to the examination of alternative strategies to answer the problems which they have identified. They substantiate their discussion with reports of existing health care delivery modalities which provide high quality service for reduced cost. Some of these microcosmic systems have operated for as long as 30 years.

Rachlis and Kushner summarize their arguments by asserting that until the voting public, as consumers of health care services, demand changes in public policy to redress the inadequacies of the current system, little that can be done will be done. This essentially optimistic, highly readable book is a *should read* for all health care consumers concerned with the quality, accessibility and fiscal responsibility of Canada's Health Care System.

Practice Profile

By:
Penny Ropchan, Dip DH

Introduction

Over the past ten years, my diploma in Dental Hygiene has provided me with countless opportunities for growth, both personally and professionally. Shortly after graduating from the University of Alberta's Dental Hygiene Program (1985) my perspective with regard to the opportunities presented by my dental hygiene training was limited. I now realize that a dental hygiene career can be multifaceted and the opportunities it provides are limited only by the limitations of one's imagination.

Background

Following graduation from the U of A I engaged in private practice at a number of different dental offices. Through these experiences I honed my technical skills and further developed my communication and interpersonal skills too. After six years in private practice I concluded I needed new challenges to enhance my career as a Dental Hygienist. In 1991, following a four-month leave of absence and a trip to Australia, I pursued certification to practice abroad. After battling with national board exams and immigration policies, I relocated to Sydney, Australia. The challenges I sought were satisfied while practising dental hygiene in a new country. And, following my return to Canada, I was presented with a novel opportunity that I believed would continue to stimulate and challenge me. I eagerly accepted the role of Manufacturer's Representative with DENTSPLY Canada's Ash Hygiene Division and find it continues to enrich and complement by dental hygiene training.

Working for DENTSPLY

I've been working for DENTSPLY for just over one year now and I can say, with all honesty, that I have learned more in the past year than I ever imagined possible. As a Manufacturer's Representative for DENTSPLY's Ash Hygiene products line it is my job to promote these products to dental professionals. My territory is limited to the provinces of Alberta and Saskatchewan where more than 8,000 dental professionals practise. I concentrate on scheduling personal meetings with these professionals to offer them information that I know can help them meet their objectives.

In addition to promoting the company's hygiene products, I offer educational training to clients who use the equipment manufactured by the company. The products I help to market include the Cavitron line, Cavitron inserts, Nupro prophylaxis paste and gel, Delton pit and fissure sealants and Disposashield barriers.



PENNY ROPCHAN, Dip DH

On a daily basis I make office calls both, in the company of retail sales representatives, and on my own. My goal is to meet with every dental hygienist in my territory. When visiting dental professionals I am prepared to respond to questions related to technique and methods of application and to discuss, in detail, the numerous products DENTSPLY manufactures. I am also available to perform minor equipment repairs and offer problem-solving advice on issues related to the company's products and equipment. During a recent sales call, I was presented with a technique-based problem that my dental hygiene training helped me resolve. A dental hygiene colleague was using a Prophy-jet air polisher she was unfamiliar with and complained that she was not getting 'great results'. I was able to sit chairside with her and demonstrate, in an actual mouth, the proper technique. (Sometimes "actions speak louder than words"!)

The job I do encompasses more than sales calls. Last spring, I was a guest lecturer at the Ontario Dental Hygienists Association's Annual Conference held in Toronto. DENTSPLY was invited to participate in a 'Manufacturer's Information Forum' which provided me with a unique opportunity to address more than 150 dental hygiene colleagues. I discussed new advances in Cavitron technology, sterilization standards for handpieces and subgingival root debridement techniques using a Slimline Cavitron insert. Needless to say, my dental hygiene training and background allowed me to address very specific concerns and issues shared by my colleagues who work in clinical practice and I'm confident it was my dental hygiene background that sparked the company to select me to perform this particular task.

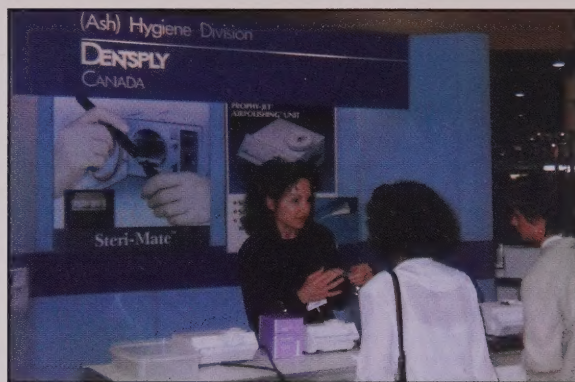
Another important part of my job is to educate my sales colleagues. Because DENTSPLY has made a commitment to be active in the growth of the dental hygiene profession both by introducing technologically advanced products and educating users about new techniques, individuals who distribute DENTSPLY products need to have a solid understanding of the line's technical implications and applications. Consequently, I often find myself facilitating educational sessions for retail sales representatives who distribute the product line. It is in performing these duties that I feel my dental hygiene background proves most valuable. Knowing, from the user's perspective, the needs and requirements of materials and equipment used in carrying out dental hygiene tasks enables me to share with the sales and marketing professionals, information, from a dental professional's perspective, that will help them to better understand the potential of the products they represent.

I can also provide valuable feedback to the company regarding their products because I can better understand, again, from a user's perspective, the limitations they may pose. While attending the ODHA conference last spring I was introduced to the individual responsible for the research and development of the company's handpiece line. The company was currently re-designing a new slow speed handpiece, which they intended to market specifically to dental hygienists. After reviewing their proposed design, I shared (what were to me, as a dental hygienist) obvious concerns and suggested alternatives that I knew would meet the needs of dental hygienists. And it would appear that my input, from an end-user's perspective, proved valuable, since the design of the final product reflected many of my ideas. There is much to be said for playing a role, however minor, in designing the 'tools of the trade' to which I belong. And it is one of the many satisfying experiences my current position offers to me.

By participating in local and regional dental trade shows and through visits to various dental hygiene schools I am also offered opportunities to update and inform dental hygienists across the country. I share information about new products and technologies designed to help them increase efficiency, productivity and quality of care and I am available to address their specific concerns. To date, my dental hygiene background has certainly helped me *understand* what they are talking about.

Last September I participated in the University of Alberta's Dental Hygiene Orientation Week. I presented a session on Ultrasonic Scaling using the Cavitron. My dental hygiene background allowed me to significantly enhance the presentation as I was able to offer second year students a 'hands-on' workshop in the clinic. Sales representatives deliver effective lecture and slide presentations, however, those with dental hygiene expertise are able to complement the presentation with experiential learning, another example of the unique edge my dental hygiene training presents to me in this role.

As you can well imagine, this job offers travel opportunities and a



CDHA member Penny Ropchan, who is a Manufacturer's Representative for DENTSPLY (Ash) Hygiene Division, is pictured here discussing products with delegates at the FDI Congress held in Vancouver, BC in October 1994.

chance to meet with hundreds of dental professionals who work in a variety of settings. Every dental hygienist that I meet with holds different views and has had unique experiences while engaged in the practice of dental hygiene.

I provide them with information and they, in turn, *educate me* by sharing their experiences and ideas. The knowledge that I gain through my daily interactions is often transmitted to others during my calls and in a sense I play a key role in information sharing between dental professionals because I spend so much time with them.

The question asked most by those I meet with from day-to-day is "Why did you leave Dental Hygiene?" And my response is, "I haven't — in fact, I sincerely believe that I am more actively involved with the profession now than I ever was before!"

Dental Hygiene Research Expertise Recognized by Dental Industry

Marilyn Goulding, who served as *PROBE's* Scientific Editor from 1989-1994 and is currently one of its Editorial Board members, has received funding from DENTSPLY (Ash) Hygiene Division to offset expenses while undertaking research to develop a thesis for a Masters Degree in Science at the University of New York at Buffalo.

Marilyn enrolled in the Masters of Science Program at the University of New York at Buffalo, on a part time basis, in September 1993 and anticipates graduating in December 1996. Her thesis is based on research that she hopes will contribute to the discovery of an optimal control for periodontal disease.

The presence of resistant forms of periodontal disease have shown that one cannot always scale and root plane exclusively to achieve an environment that supports the delicate balance of gram positive aerobes necessary for periodontal health. Augmentive efforts designed to achieve the ideal environment, such as ultrasonic debridement and antimicrobial therapy have had their limitations. Local delivery of chemotherapeutics by irrigation or by placement of fibres impregnated

with antibiotics offer promising alternatives. Periodontic researchers have, in recent years, been focusing on various methods of delivery. The challenge lies in developing a truly "controlled" drug release system that eliminates the bulk retention of the medium in the pocket and does not require post treatment (i.e. the removal of fibre).

An alternative delivery method for chemotherapeutics is subgingival irrigation, but this too has been plagued with conflicting and inconclusive results in both clinical and microbiological parameters. Some of the issues raised during subgingival irrigation include: optimal method of irrigation, penetrability of irrigant, choice of irrigant, optimal time of irrigation, augmentive measures to irrigation and treatment planning with the use of irrigation.

Marilyn's research, which is being conducted under the direction of Russell Nisengard, DDS, PhD at the School of Dental Medicine, University of New York at Buffalo, focuses on the slow release activity and substantivity of Pro Sol CHX and Chlorhexidine delivered at various concentrations and under various

conditions. Her study is designed to address a number of questions surrounding current efforts to control periodontal disease with chemotherapeutic irrigation. The concentration of chlorhexidine diminishes slowly (inherent substantivity) and Marilyn's research is designed to determine whether or not this characteristic can be manipulated to act as a slow release property. She is seeking to discover the 'optimal time' necessary to achieve substantivity of chlorhexidine to guarantee optimal "kill" of the pathogenic microflora and seeks to discover whether the action of ultrasonic scaling, in conjunction with irrigation will augment the mechanism of substantivity.

The study's intended completion date is December 1996 and DENTSPLY has agreed to cover costs related to tuition fees, materials and equipment. Marilyn says the funding arrangement is flexible and has had "no demands on either protocol design or follow-up". She is planning to attend the American Association of Dental Research being held in San Antonio, Texas in March 1995 to investigate similar questions related to her research.

Educating Teens:

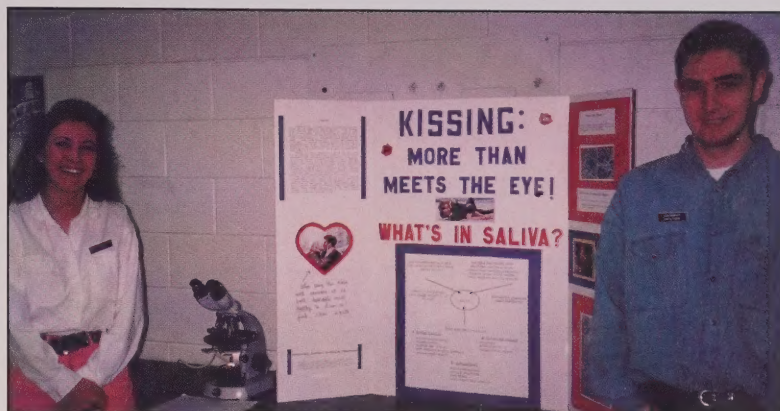
University of Manitoba Dental Hygiene Students Connect!

The 1200 ethnically-diverse students of Daniel McIntyre High School were the enthusiastic recipients of a CDHA National Dental Hygiene Campaign oral health fair designed and delivered by the second year dental hygiene students of the University of Manitoba.

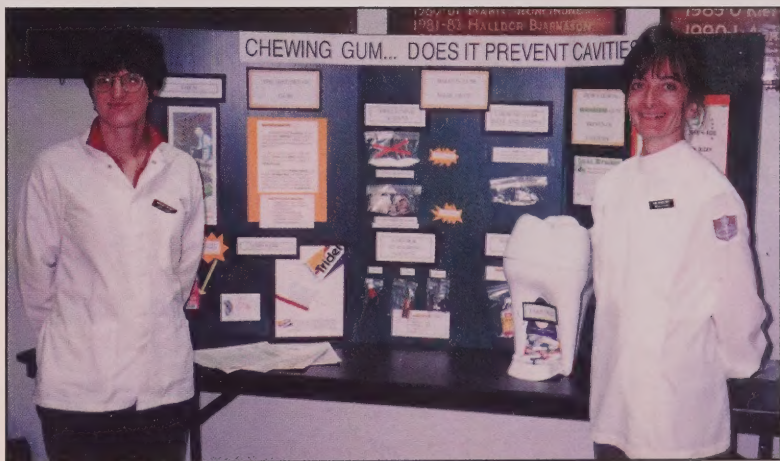
Promotion efforts included snazzy posters and clever bulletins included in the morning announcements. As well, a dental hygiene student-designed questionnaire was distributed at the school. The survey results inspired the development of these displays:

- Kissing: More than Meets the Eye
- Is Crest the Best? — Choosing your Toothpaste
- Could your Bad Breath Wilt Flowers?
- Hundreds of Toothbrushes: How to Choose
- To Bleach or Not To Bleach?
- Brushing and Still Getting Cavities?
- Chewing Gum — Does it Really Prevent Cavities?

The displays were eye-catching and informative, featuring demonstrations, a microscope, chewing gum, a CDHA sweatshirt draw (Thanks CDHA), a game, fact sheets, and more. The numerous questions posed to the dental hygiene crew confirmed the genuine interest of both the high school students and their teachers. At the general information booth students picked up some more tips about mouthguards, smoking and dental hygiene as a career. To qualify to win numerous prizes donated by dental suppliers, students had to correctly answer two skill-testing questions. Prizes awarded included an Interplak toothbrush (thanks to Bausch & Lomb), a University of Manitoba t-shirt (thanks to the dental hygiene students), four movie passes (thanks to Cineplex Odeon), a bookmark, key chain and mug (thanks to the University of Manitoba bookstore), and three oral hygiene kits (thanks Oral B).



At Kissing: More Than Meets The Eye, Marilyn Fidler and Leonard Serfaty drew many interested teens. Although they learned about saliva's many benefits, "gross!" was their comment when they discovered what salivary bacteria looked like under a microscope and smelled like when cultured on agar plates.



At Chewing Gum...Does It Prevent Cavities? Andrea Lintott and Kim Crawford's display provided free chewing gum and free advice about the benefits of chewing sugarless gum. And...did you know that DENTYNE is a contraction of "Dental Hygiene"?

The dental hygiene students reported that by effectively communicating with a large teen population through this event they were able to make a contribution to achieving health for all.

*Submitted by: Olga Abrahams,
Dagmara Brok, Christine Regier,
University of Manitoba,
School of Dental Hygiene*

HEALING HANDS



Linda Ambrose, RDH, CST
 Certified Shiatsu Therapist,
 Registered Dental Hygienist,
 Fitness Instructor, Organ Testing,
 Homeopathy, Fitness Evaluation,
 Nutrition Counselling, Bodywork,
 Self Healing, Psychotherapy
"Guide to Inner Peace"

350 Sammon Ave.
 Toronto, ON M4J 2A5

(416) 462-2836

Make a commitment to personal and professional growth.

Subscribe today!

Six times a year
Professional Hygiene Development Services
 produces

**12 - 16 pages of hygiene related summaries and
 abstracts** from a wide variety of dental, hygiene and
 health related journals.

PHD Services newsletter contains no advertisements
 and in some provinces **qualifies for CE credits.**

Subscribe by phone or mail.

Visa, Personal Cheque & Money Orders welcome.

1 year \$48.00, 2 years \$90.00, add 7% GST.

(Hesitant? Request a sample copy.)

PHD Services
 Dept. 563, P.O. Box 48808
 Bentall Centre,
 Vancouver, BC V7X 1A6

(604) 683-6604
 phone/fax/voice mail

Advertisers' Index

Butler	OBC
Bausch & Lomb	4
Dentsply	IFC
PerioReports	21
Perio Powerdantics	27
Premier Dental	IBC

The Canadian Academy of Periodontology
Annual Convention, May 5-7, 1995
Toronto, Ontario

Special Hygiene Program, May 6, 1995
Periodontal Regeneration - A Team Approach

This presentation will focus on the role of the dental team in aspects of:
 presurgical treatment, surgical therapy, adjunctive techniques, post-
 operative care (including management of hypersensitivity), supportive
 periodontal therapy and practice management issues.

Presenters:

Dr. Pamela McClain has a unique understanding of the staff's role in
 regenerative therapy. She has had experience in all phases of the periodontal
 office including several years working as an assistant, and subsequently, as a
 dental hygienist. She currently maintains a fulltime periodontal practice and
 is a part-time Assistant Professor at the University of Colorado, School of
 Dentistry. She is past President of the Rocky Mountain Society of
 Periodontists and a Diplomate of the American Board of Periodontology.

Dr. Robert Schallhorn is recognized internationally for his contribu-
 tions in regenerative topics. He is a past President of the American Academy
 of Periodontology and former Chairman of the American Board of
 Periodontology. He maintains a full-time practice in Aurora, Colorado.

For registration information, please contact

C.A.P. Office c/o Sharon Bangham

Suite 103, 1815 Alta Vista Dr., Ottawa, ON K1G 3Y6 (613) 523-3876

SIAS T Wascana Institute Regina, SK

Dental Assisting 20 Year Reunion

We would like to extend an invitation to former instructors and
 graduates to attend our 20th year reunion.

Where: Hotel Saskatchewan - Radisson Plaza, Regina, SK

When: June 30 - July 2, 1995

What: Friday, June 30 - Come and Go Registration

Saturday, July 1 - Banquet/Dance

Sunday, July 2 - Tour of St. John St. Dental Clinic/Brunch

For more information contact Dental Assisting Reunion,
 C/O Dental Assisting Program, PO Box 56, Regina, SK, S4P 3A3

Hygienist Wanted

35 Hrs/Wk in beautiful northern BC.

We believe in providing quality, professional dental care.
 Surrounded by beautiful mountains, Smithers is an outdoor
 paradise offering skiing, hiking, fishing, hunting and much
 more. Our practice is fun, challenging and team-oriented.
 If this describes you, our hygiene-oriented practice is seeking
 you. For more information, contact Terri or Maryse at

(604) 847-2722 or

fax your resume to (604) 847-4547.

EASIER SCALING

WITH SHARP, LIGHT-WEIGHT INSTRUMENTS



YOU WORK HARD ENOUGH!

Relieve finger fatigue associated with scaling procedures by using light-weight, LIGHT TOUCH™ hollow handle SCALERS and CURETTES from Premier®. Then keep them sharp with PREMIER® DISC™.

DISC™ SIMPLIFIES INSTRUMENT SHARPENING!

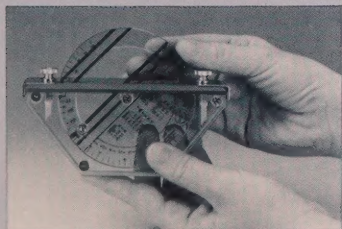
Your instruments are always at peak performance because you maintain the appropriate angle as you sharpen faster. And Disc's autoclavable ceramic sharpening stones clean easier and never need oil or water.

LIGHT TOUCH ROUND (LT) and OCTAGON (LTO) hollow handle SCALERS and CURETTES are made entirely of surgical stainless steel. The larger yet lighter handle is easier to grip to help reduce fatigue!

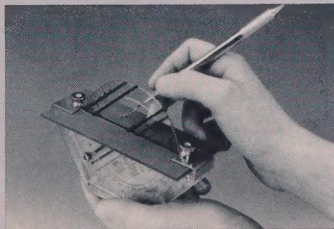
* Free goods provided by participating dealers. Dealer may lower price in lieu of free goods. May not be combined with other instrument offers. Offer expires 4/30/95



CALL FOR A FREE IN-OFFICE INSTRUMENT SHARPENING DEMONSTRATION.
ORDER THROUGH AUTHORIZED DEALERS.



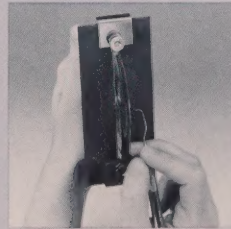
ROTATE PROTRACTOR DIAL TO APPROPRIATE ANGLE SETTING.



REST BLADE ON SHARPENING STONE WITH INSTRUMENT HANDLE HELD PARALLEL TO BLACK GUIDE LINES.



IN A FEW SHORT STROKES YOU WILL HAVE A PERFECTLY SHARPENED INSTRUMENT. IT'S THAT EASY!



Premier Dental (Canada), Inc. • 480 Hood Road, Unit #3 • Markham, Ont. L3R 9Z3 • 1-800-465-8455

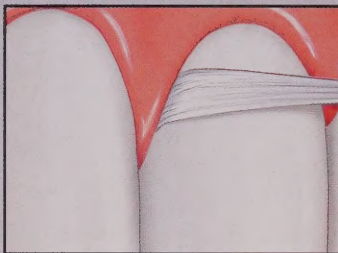
BUTLERWEAVE™ FLOSS

The Latest Addition To Our Floss Line

WIDE LIKE A TAPE



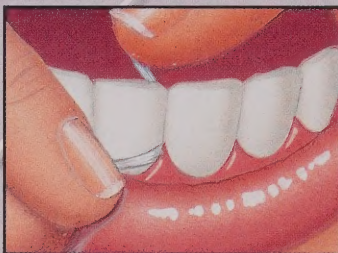
Introducing ButlerWeave™ the *Spreadable* dental floss. In sulcular and interproximal areas, ButlerWeave™ spreads out, so it covers like a dental tape, to clean and remove plaque effectively.



THIN LIKE A FLOSS



With its thin, flat profile, ButlerWeave™ easily glides between tight contacts, and cleans those often-missed spaces between teeth and gingiva.

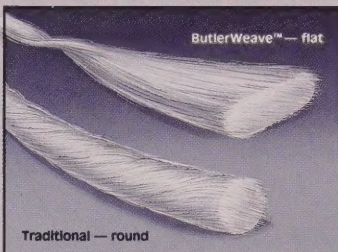


UNIQUE BUTLERWEAVE™



ButlerWeave's unique "Interlacing" process produces a Strong, Smooth, Shred-resistant floss, — an innovation that makes flossing easy, comfortable, and effective.

Available in unwaxed, waxed, and mint waxed.



ButlerWeave™ The floss that cleans like a dental tape.

JOHN O. BUTLER COMPANY,
515 GOVERNORS ROAD, GUELPH, ONTARIO N1K 1C7
ACROSS CANADA: 1.800.265.8353
SERVICE EN FRANÇAIS: 1.800.265.7203

BUTLER

For Strong Healthy Teeth That Last.

dent

THE CANADIAN DENTAL HYGIENISTS ASSOCIATION
JOURNAL DE L'ASSOCIATION CANADIENNE
DES HYGIENISTES DENTAIRE

PROBE

VOL 29, NO 2

MAR/APR 1995 MARS/AVR

UNIV OF TORONTO LIBRARY
SERIALS DEPARTMENT
TORONTO, ON
CANADA, M5S 1A5.



Jody Shworan
RDH

Diane Tate
RDH

WHAT'S INSIDE:

• ORAL CANCER SCREENING

• GUIDED BONE REGENERATION

• NDHC '94 HIGHLIGHTS

New Great Tastes, Less Fillings

NUPRO®
Prophylaxis Paste

Leading
Through
Innovation

(Ash) Hygiene Division

DENTSPLY
CANADA

Offering you the full treatment

Patients will love the new flavors of the prophylaxis paste that's been the leader for years: Nupro.

No wonder it's preferred by seven out of ten hygienists* and too many patients to count. Besides giving you five flavors, four distinct grits and a special non-splatter formula, Nupro prophylaxis paste also gives you confidence. No other prophylaxis paste has been used effectively in more prophylaxes.

Order Nupro prophylaxis paste in conveniently sized single-dose cups. Call your authorized DENTSPLY Canada dealer today, or call **1-800-263-1437**. Your patients will love the flavor and you'll see a lot more smiles.

A Division of DENTSPLY Canada Limited • Woodbridge, Ontario L4L 4A3

*Polk-Lepson Research Group

Don't Chew Up Every Article You Read

By:

J. Lynn Guest, Dip DH, BHE

My taste in reading material has taken on a more academic flavor since I began working towards my Master's degree. I was browsing in the bookstore at UBC on *Customer Appreciation Day* and came out with a credit card receipt and *Critical Issues in Qualitative Research Methods* edited by Janice M. Morse. The chapter entitled "Qualitative Research Methods from the Reviewer's Perspective" has contributed to my thoughts for this editorial. I have also been reading in Michael Quinn Patton's *Qualitative Evaluation and Research Methods*; a section in the chapter discussing analysis, interpretation and reporting jumped off the page at me. In that section, I found the following passages: *"Academic social scientists have a tendency to want to withhold their findings until they have polished their presentation.... Evaluators who prefer to work diligently in the solitude of their offices until they can spring a final report on a waiting world may find that the world has passed them by. Feedback is most useful as part of a process of ongoing thinking..."* (page 378) I recognized myself in these words. I am hesitant to write anything for publication and this reluctance has given me cause for thought.

My thoughts keep returning to seminars that I attended as part of my course work. Since returning to school in 1992 I have participated in a number of sessions intended to provide the participant with a *critical eye*. When presented with a published article we asked a series of questions: Is the sample size sufficient? Is there bias? Does the work utilize measurement techniques that are valid and reliable? Are there any faults in the logic of these conclusions? I look back now on myself as a willing participant in these sessions and was as quick (at least I think so) as anyone else to find faults, be they major or minor.

Two years, a methods course and a good deal of reading and discussion have passed. Now I have come to the point in my own research where I must consider sharing my findings and have been rethinking those sessions and my comments. Things have taken on a new perspective now that I am facing putting my *own* work "out there"!



J. LYNN GUEST, Dip DH, BHE

(I think it does need a lot more polishing...) It is difficult to make that first contribution to what one of my professors called the "continuing conversation" in a particular area of research. A researcher never knows what the reaction to her/his contribution will be, particularly when the research has employed methodology that does not lend itself to evaluation utilizing what I will call the "traditions of science". My work would not stand-up to an application of the questions I was so quick to ask a couple of years ago. I have interviewed fifteen older adults about the relationship between quality of life and their oral health. A review of the literature with respect to oral health and quality of life left me with questions. The literature indicates that oral conditions impact on quality of life. I began to wonder whether older adults make the connection between oral health and quality of life as well as researchers. I wanted to explore how older adults describe the concept we call "quality of life" and try to understand any relationship they see between their oral conditions and their quality of life. These are questions that do not lend themselves to large scale applications of carefully standardized rating scales or questionnaires. We cannot apply the same framework when considering the merit of this type of research as we do when looking at work that is quantitative in nature.

I am not saying that qualitative methods deserve special treatment and should be exempt from scrutiny. However, I would suggest that it requires, consideration in a slightly different manner, before dismissal. (As I would have dismissed it a couple of years ago.) What is the significance of the work? Is the method appropriate to the questions being asked? Are they appropriately justified and described? As Patton mentions above, feedback is most useful as a part of the process of ongoing thinking. Let's keep this in mind when considering the analysis and conclusions. Instead of attacking research on the basis of technicalities, let us instead give careful consideration to the value of the work and the subsequent questions it asks. This becomes the "continuing conversation" and results in a contribution to knowledge. In such a supportive environment, perhaps I would be less likely to confine myself to my office and be more willing to put my work "out there". I would venture to guess I am not alone.

Dental hygiene research needs support and encouragement. The Editorial Board wants to create this type of atmosphere by developing a Mentoring Program and a Manuscript Writing Workshop. Janice Edgar outlined these in the "Letters to the Editor" section in the last edition of *PROBE*. For myself, it's on to thesis completion and then I plan to pair myself with a mentor and make a submission to this journal. I encourage others to think about doing the same. (I am also looking forward to the day when I can enjoy a really good book that doesn't require any analysis!) 

Lynn Guest is a member of *PROBE*'s Editorial Board. She graduated from UBC's Dental Hygiene program in 1975 and later earned a BHE, majoring in Nutrition. She worked as a dental hygienist in private practice from 1975-1980. Since 1980 she has worked as a community dental hygienist in the Fraser Valley Region of British Columbia. In 1992 she enrolled in the MSc (Dental Science) program at UBC and continues to study while working.

FINALLY THERE'S A REALLY EFFECTIVE SOLUTION FOR SENSITIVE TEETH!



NEW SENSODYNE® DESENSITIZING SOLUTION.

**Stops pain fast
in the office.**

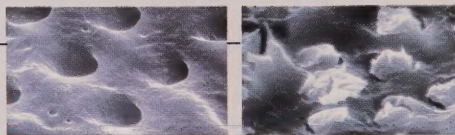
New Sensodyne Desensitizing Solution is the fast, easy, really effective way to treat sensitive teeth right at chairside. A single application takes only 60 seconds, provides relief in minutes and lasts for months.

**ON-THE-SPOT
RELIEF FOR
SENSITIVE
TEETH.**

**Continues relief
at home.**

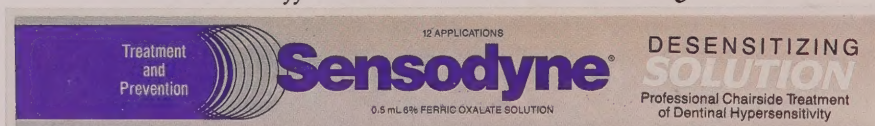
Recommend regular brushing with Sensodyne-F – the most trusted home treatment for sensitive teeth. Sensodyne Desensitizing Solution and Fluoride Toothpaste have complementary modes of action that enhance and prolong relief.

Before Treatment



After Treatment
Ferric Oxalate* obturates
open dentinal tubules.

In the office and at home Sensodyne®



* See your Block Drug rep for clinicals.

Complete care for sensitive teeth.

1-800-268-5747

B BLOCK DRUG COMPANY (CANADA) LTD.
7600 Danbro Cres., Mississauga, Ontario L5N 6L6

COLLEAGUES FROM COAST TO COAST



Impressive impressions! On the cover we feature Jody Shworan and Diane Tate, two dental hygienists practising in private practice in Parksville, British Columbia who participated in a Mouthguard Clinic held during the CDHA's 1994 National Dental Hygiene Campaign. Diane is a graduate of the University of British Columbia's Dental Hygiene Program (1978) and has worked in private practice in Parksville since graduating. Jody is a graduate of the University of Alberta's dental hygiene program (1991). She worked for a year in private practice in Calgary and now works with her husband/dentist at his dental clinic in Parksville. Featured with Jody and Diane in this photo from (l-r) are: Diane Tate, Jody Shworan, Yvonne Smith, Jillian Mohr and Debbie Whitter, the crew of dental hygienists who participated in the Parksville Mouthguard Clinic.

Editorial	39
Don't Chew Up Every Article You Read — J. Lynn Guest, Dip DH, BHE	
Letters to the Editor	42
President's Message	43
Debate is Great	
News	46
Ethics: Sharpen Your Professional Edge	50
— Nancy Neish, BA, Dip DH, Brenda Fortune, Dip DH	
Scientific	53
The Dental Hygienist's Role in Screening for Oral Cancer — L. Cormier, Dip DH, C.L.B. Lavelle, DDS, MBA, FRC.Path	
Practice Profile	59
— Beverley Contreras, Dip DH	
Resource Centre — New Acquisitions	60
CDHA 6th Annual Professional Conference	61
Registration Form	
Continuing Education	63
Abstract	64
Oral Leukoplakia and Erythroplakia: A Review and Update Chlorhexidine Use After Two Decades of Over-The-Counter Use — prepared by Carol Barr Overholt, Dip DH	
Book Review	65
Oral Pathology for the Dental Hygienist — Olga A.C. Ibsen, RDH, MS, Joan Anderson Phelan, DDS — Reviewed by MWO Claude Bujold, RDH, CFDSS, Borden, ON	
Self-Assessment Test	66
Oral Microbiology — prepared by Marg Pyett, St. Clair College, Windsor, ON	
NDHC Report	67
Student Scene	69
Case Study	72
Guided Bone Regeneration — Leanne D. Carlson-Mann, Dip DT, Dip DH	
Classifieds	74

CONTENTS



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

PROBE

MARCH/APRIL
1995
MARS/AVRIL

Editorial Director/Scientific Editor:
D. Landry, Dip DH, Dip DN, BA, BV/TEd

Managing Editor:

J. Edgar, BJ

Statistical Reviewer:

R. Dunford, BSc, MSc

Contributors:

Carol Barr Overholt, Dip DH

Leanne Carlson-Mann, Dip DT, Dip DH

Nancy Neish, BA, Dip DH, Med

Brenda Fortune, Dip DH

Editorial Board:

E. Brownstone, BA, Dip DH, Med

S. Amer, Dip DH, MS

L. Boomhour, Dip DH

M. Goulding, Dip DH, BSc

L. Guest, Dip DH, BHE

Design:

Nancy Poirier Type Services

Published six times a year by the
Canadian Dental Hygienists Association,
Centrepointe Chambers, 96 Centrepointe Drive
Nepean (Ottawa), Ontario K2G 6B1
Tel (613) 224-5515

Canada Post Publications

Mail Registration No. 5793

CANADIAN POSTMASTER:

Notice of change of address and undeliverables
should be sent to the

Canadian Dental Hygienists Association
Centrepointe Chambers, 96 Centrepointe Drive
Nepean (Ottawa), Ontario K2G 6B1

Subscriptions \$69.55 (GST included) in Canada, \$110.00 Cdn.
for U.S. & \$115.00 Cdn. elsewhere. Fifty cents per issue is
allocated from membership fees for Journal production. All
statements are those of the authors and do not necessarily
represent CDHA, its executive, or its staff.

Advertising & Subscriptions:

Keith Health Care Communications

1382 Hurontario Street

Mississauga, Ontario L5G 3H4

(905) 278-6700

© CDHA 1995

6176 CN ISSN 0 834-1494

GST Registration no. R106845233



CDHA Central Office Staff

Executive Director	Carol Matheson Worobey
Manager, Publications & Conference	Janice Edgar
Financial Coordinator	Monique B. Rock
Member Services Coordinator	Sandra Vanwart
Member Services Assistant	Sue Turcotte
Administrative Assistant	Donna Awrey

All CDHA members are invited to call CDHA's Central Office,
toll-free, with their questions/inquiries:

1-800-267-5235, Fax (613) 224-7283

We look forward to serving you.

The Canadian Dental Hygienists Association Journal: Probe is the official publication of CDHA. CDHA invites submissions of original research, discussion papers, and statements of opinions pertinent to the dental hygiene profession. All manuscripts are refereed anonymously. Contributions to Probe do not necessarily represent the views of the CDHA, nor can CDHA guarantee the authenticity of the reported research. Copyright 1995. All materials subject to this copyright may be photocopied for the non-commercial purpose of scientific or educational achievement.

LETTERS TO THE EDITOR

Dear Editor:

I was very excited to read Maxine's President's Message in the Sept/Oct issue of the *PROBE*. The idea of providing oral hygiene care to those who are dependent on others for their daily care is a concept that we as hygienists must push the boundaries on, both in our thinking and in the thinking of others. We are primary oral health care providers, first and foremost, and this does not just involve dental office procedures but encompasses all the possibilities of oral care outside a dental office setting.

We must ask ourselves questions such as — what about the people in group homes, long term care facilities, nursing home, hospital extended care units, those receiving daily home support or any other situation that requires dependency on others for daily care? How do we access these people to provide, either themselves, or their caregivers with the home knowledge and skills necessary to improve and maintain their oral hygiene? If we can provide a means to do this we can improve their quality of care and therefore their quality of life as well as contribute

towards the reduction of the health care costs. These are some of the questions we need to ask ourselves and then we can search for a means to answer the questions we ask.

I encourage any hygienist who may want to provide oral hygiene care, to those who are dependent on others for their care, to take the initiative. Use the resources of networking with those who have established new programs to provide such care. It will be both rewarding for you and for the client and it adds yet another dimension to the practice of the profession of dental hygiene.

**Judy Blake, RDH
Port Alberni, BC**

Dear Editor:

When I opened the recent issue of *PROBE* (Vol 28 No 6) and saw the title of your newest editorial, I gasped, and of course was thrilled and honored by its meaning and implications!!

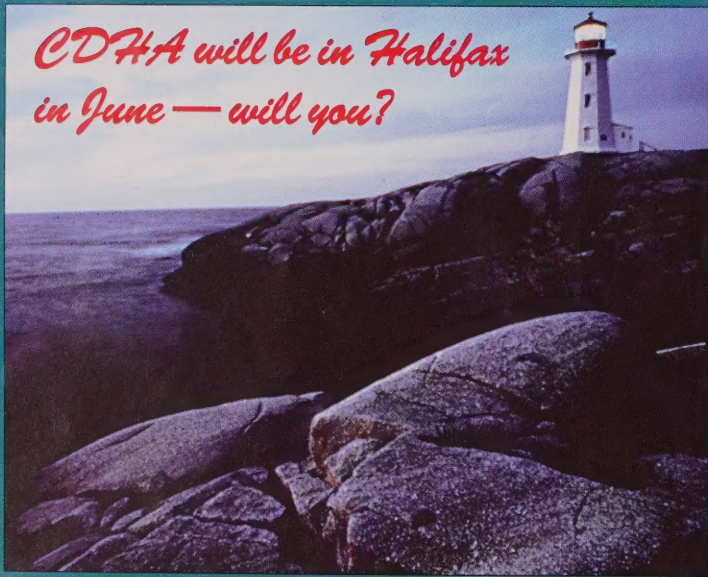
Thank you so much for many reasons — first the many personal reasons, but too, the

significance to the profession, the humor of the quotes from the "older" edition (and how sincere it all was at the time!!), and especially your pertinent insight into habit changing, continuous learning, and our internal quality assurance, to mention a few of the significant points you made.

I always look forward to receiving the *PROBE* and enjoy everything in it — especially the editorials and reports of the activities of CDHA since I have had so many pleasant encounters with your enthusiastic and devoted members. While preparing the new edition of CPDH I made a real attempt to use as many references to your scientific articles as possible.

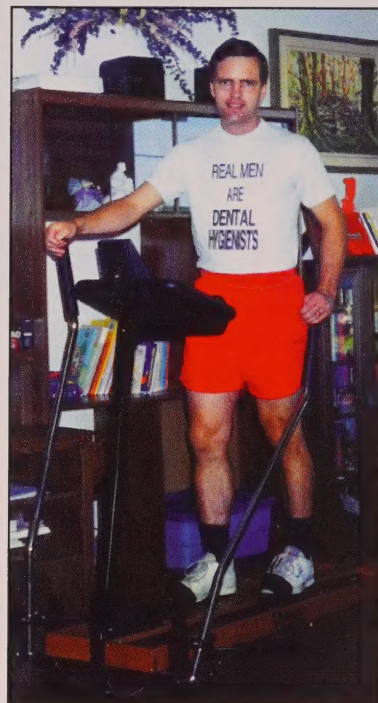
With wishes for a prosperous year ahead that keeps you and your publication in the limelight!! And my warmest thanks and best personal wishes to you.

Sincerely,
Esther Wilkins, RDH, DMD



*CDHA will be in Halifax
in June — will you?*

Register now for CDHA's Annual Professional Conference — a great opportunity to learn and earn CE Credits (more than 13 credits in one weekend). Go to page 62 for the registration form, copy it, complete it and register today!



Dental Hygiene student Vince Everett of Prince George, British Columbia sporting a fitting message! Vince is a dental hygiene student at the College of New Caledonia. We thought our members would appreciate his message!

Debate is Great

I like to think of myself as “a lover not a fighter”, and when it comes to personal issues that is certainly the case. Avoiding conflict at almost any cost is my usual style. However, when it comes to *professional issues* another attitude prevails. I think it is important to discuss, debate, and when necessary, take a stand.

Some issues can never be resolved by reaching a consensus; a fact sometimes hard to accept, but essential to grasp. When I think back to some of the issues debated during the last twenty years while I have been practising oral health care, I'm convinced that we cannot rely on previously learned, so-called “truths”. We must constantly be open to new information and be prepared to change our minds and practices as reason, research and client involvement demands. As we know, some of the issues open to debate today extend beyond our profession and the field of dentistry, they are in the public domain. People are questioning and we need to be prepared to respond. (Notice I didn't say ‘answer’, acknowledging there isn't always a definitive answer.)

What are some of the current issues up for debate? Well they vary, from the theoretical to the practical, from the political to the financial, from the philosophical to the territorial, from fundamental to frivolous, even from intuitive to scientific and of course ethical. The topics, although interesting, aren't as important as the process of deliberation. Topics change, the need to debate them doesn't!

Let's take the practice of dental hygiene for example, we define dental hygiene as an ART and SCIENCE. The definition I don't debate, but what I would love to debate sometime is the significance of each. My inclination is that the art of dental hygiene is worthy of a lot more attention and research than it currently receives when compared to the science of dental hygiene. As a profession, I feel we underestimate the influence of “how” we practice has on the effectiveness of “what” we do.

A more concrete issue, we have been discussing of late, can even be debated in terms



**MAXINE BOROWKO,
DIP DH, DIP DT, CERT V/TEd**

of what category it belongs to, political, territorial or fundamental. The issue to which I am referring is self-regulation or self-governance (depending on the province). What was once a giant step for dental hygiene is fast becoming routine business. What was once debatable in some provinces, is now government policy. In other provinces, the debate still continues, but as self-regulation matures in many provinces, the fuel and information for the debate will be enhanced.

Topics, such as independent practice and supervision are often debated by people using different definitions, parameters and therefore, understandings of a concept. Debates like these tend to go around in circles with both parties getting further apart. Emotions and economics can interfere with progressive debate. A trap to beware of and to avoid if it doesn't serve our clients' best interests.

Even debate over practice modalities: hand instruments versus ultra sonic scalers, local anaesthetic versus the “grin-and-bear-it approach”, or diagnosis versus assessment, can live up a lunch hour or study club. The ideal recall system, oral hygiene products and methods, intra-oral versus extra-oral

finger/hand rests, and other basics need to be revisited to ensure we are working to our and our clients best advantage. All topics are worthy of debate regardless of how trivial they may seem, *if* they have the potential to improve our performance.

Debate, whether internally, within the profession, or externally, in the public domain, has the great benefit of making us think. Debate challenges what we do, think and say, and gives us the opportunity to advance our knowledge and practice options. I don't deny, it is often risky, to confess what we think and do, but the benefits can far out-weigh the risks. And, there *are* benefits, not only for us as individuals, but for the profession as well, when we all participate in constructive, supportive debates. Although no one is right all of the time, by using debate, we can at least confirm the number of times we are right, change when we are convinced we should, and as the situation warrants, proudly make our stand and let history decide. 🇨🇦

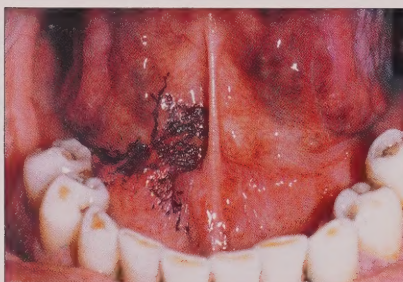
Maxine obtained diplomas in Dental Therapy (1974) and Dental Hygiene (1984) from Wascana Institute in Regina, and a diploma in Adult Vocational Technical Education (1985) from the University of Regina. Her background includes clinical, educational and administrative positions in public health, post secondary education and private dental practice. Maxine also has experience as a dental hygienist in Long Term Care Hospitals, providing care to intermediate and extended care residents, and is currently working in Community Health providing services to the Mentally Challenged. Maxine maintains part-time employment in private dental practice. Her professional goal is to work toward the establishment of dental hygienists as recognized members of the Multi-Disciplinary Health Care Team.



NOW YOU CAN **SPOT** CANCEROUS LESIONS BEFORE YOU CAN EVEN SEE THEM.



BEFORE STAINING: Vague area of questionable erythroplasia on the right floor of the mouth.



AFTER STAINING: Intense, irregular stain delineates location for biopsy. Subsequent biopsy confirmed squamous cell carcinoma.

The highly sensitive ingredient in the cup above can stain previously undetected oral cancer lesions blue - before they become symptomatic.

Introducing OraScan - Toluidine blue O ("OraScan").

Now you can supplement exams with the first oral cancer detection system. OraScan has the dramatic ability to stain cancerous tissue a readily apparent royal blue for quick identification.

Survival rates are improving for every type of cancer except oral cancer. That's because it's difficult to detect in its early stages. In fact, six out of ten lesions have already metastasized by the time they are discovered. You can increase the likelihood of early detection and successful treatment by testing your patients with OraScan now.

The highly effective OraScan system provides a fast and simple rinsing method for early cancer detection which greatly increases the patient's probability of treatment with minimal morbidity, impairment and deformity.

Your high risk patients - those over forty who use tobacco and alcohol - could benefit significantly from regular testing with OraScan.

Until now, dentists and physicians had to rely on unaided visual examination and nonspecific physical evidence to identify lesions for biopsy. Because of its sensitivity and accuracy, OraScan is also ideal for biopsy site selection.

Don't wait until your patient has metastasized cancer. Test now with the only oral cancer detection system available: OraScan.



OraScan™



Under license from Zila Pharmaceuticals, Inc. Canadian patent #1 180 648.

For A Free Video On Oral Cancer & OraScan™
Call 1-800-265-9931

ORAL CANCER

Perception



Oral cancer is easy to find.

It's hard to identify which patients need an oral cancer exam.

Patients will object to my raising the issue of oral cancer.

The dentist's responsibility is healthy teeth and gums.

Oral cancer is so rare, my patients don't care about it.

Survival rates for oral cancer victims are improving.

Since there is a correlation between oral cancer and smoking and drinking, patient education is a responsibility of the physician.

Reality*



60% of lesions are advanced at the time of discovery. This diminishes the chance for successful treatment.

The profile of the typical oral cancer victim is a heavy smoker and heavy drinker over age 40.

Patients will appreciate your concern and respect your judgement. Patients are used to cancer tests like the Pap smear, mammogram and PSA blood test.

Dentists are clinically responsible for detecting all abnormalities in the oral cavity, especially cancer.

Oral cancer is more than twice as prevalent as cervical cancer and far deadlier (due to late detection). Yet, high risk patients for cervical cancer are routinely given Pap smears.

While the survival rate of victims of other cancers are improving (in part due to earlier diagnosis and treatment), there has been no improvement in the five year survival rate of oral cancer victims for two decades.

Dentists are the first line of defense against oral cancer so they have the primary responsibility to educate patients on the risks of smoking and drinking.

Oral Cancer Perception vs. Reality presented by Germiphene Corporation, maker of OraScan™, the first oral cancer detection system.

* Mashberg, A, Samit: Early Detection, Diagnosis and Management of Oral and Oropharyngeal Cancer.

Ca-A Cancer Journal for Clinicals 39(27):67, 1989.

National Cancer Institute of Canada "Canadian Cancer Statistics," April 1992.

Chen J, Katz RV, Krutchkoff D.J. Epidemiology of Oral Cancer in Connecticut: J Dent Res 1989;68:910.

Silverman, S., Oral Cancer. 3rd ed., American Cancer Society, New York, 1990. pp 1,41.

Advertisement

Executive Council

President
Maxine Borowko
President Elect
Margery (Marnie) Forgay
Vice President
Sue MacIntosh
Past President
Fran Richardson Cotton

Member Services

Chair, Aileen Seed
Diane Skene-Derksen

Audrey Newcombe
Luisa Mohan
Barbara Hewton

Health Promotion

Chair, Judy Parker
Sharyn Milroy
Wanda Staples
Patricia Noble
Heather Tommy

Practice & Regulation

Chair, Judy Clarke

Darlene Armstrong
Pamela Vokey
Sue Raynak
Kathleen Adams

Professional Development

Bonnie Craig
Charla Lautar
Stephanie Nagle
Eleanor McIntyre
Corinna Recker

**Health Canada
Representative to
Board**
Sharon Amer

**Corporate Relations
Officer**
Joan Degan

Speaker
Lynn James

**IFDH
Representatives**
Dale Scanlan
Ellen Brownstone

NDHC Coordinator
Dawn Mueller



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

Your Professional Partner

British Columbia Establishes College of Dental Hygienists

The College of Dental Hygienists of British Columbia (CDHBC) was one of four new colleges established under BC's Health Professions Act, BC Health Minister Paul Ramsey announced on December 20, 1994. Other new colleges established at the same time will regulate opticians, massage therapists and physical therapists.

This marks the first time Dental Hygiene has been regulated as a self-governing profession in the province.

"The colleges enable us to better protect the public and offer British Columbians a wider variety of safe, quality health services," said Ramsey.

The colleges will set standards of practice and education, develop codes of ethics and review complaints. Boards of directors, made up of one-third public members, will draft bylaws to govern the professions.

The government accepted the Health Professions Council's recommendation to establish colleges regulating opticians and dental hygienists in March 1994.

Dental hygienists will continue to provide dental hygiene services in private dental offices. However, specially-qualified hygienists will now be permitted to work independently in institutional settings.

CDHA Board of Directors Tour New National Headquarters



While in Ottawa for the annual interim Board Meeting, CDHA's Board of Directors had an opportunity to visit the Association's new national headquarters located in Centrepointe Chambers at 96 Centrepointe Drive in Nepean. Board members say the new space is functional and provides an image that will instill pride in CDHA members across the country.

In November 1994, the Association purchased a new building to house its Central Office operations. The new building is

expected to accommodate the growth and expansion of the Association well into the 21st century.

CDHA President Maxine Borowko says she doesn't like the new space, she *loves it*. "I think the Association's new home really meets the current needs effectively and it also allows for continued growth and development."

The office occupies space in a newly developed business condominium complex situated across from Nepean's City Hall. (Incidentally, the developers of the complex received a Design Award (Small Business Category) for Centrepointe Chambers, from the City of Nepean's Planning and Developing Department.) The new location offers quick and easy access to downtown Ottawa and the airport. The Association currently occupies two of the three floors in the building and leases space in the lower level to a child psychologist.



CENTREPOINTE CHAMBERS



CDHA President Maxine Borowko "pops the cork" in celebration of CDHA's new building-owner status.



Notice of CDHA's Annual Session

The Canadian Dental Hygienists Association will be holding its 32nd Annual Session in conjunction with its Annual Professional Conference this June in Halifax.

The meeting will be held on Thursday, June 22, 1995 commencing at 1 pm at the Sheraton Halifax in Halifax, Nova Scotia. All CDHA members are invited to attend.

CDHA Board Members Meet In Ottawa To Set Priorities for Upcoming Year

Members of the CDHA Board of Directors met in Ottawa, January 26-29 to review the Association's direction for the next five years and establish priorities for the next 12 months. Their deliberations confirm the profession's need to continue to focus on increasing access to care which, in turn, highlights a need for the profession to look at additional opportunities and ways to provide oral health services to the public.

"We want to focus on creating opportunities for choice — choice for the public in how they access oral health services and choice for our members in how they can meet the oral health care needs of the public," says CDHA President Maxine Borowko.

In concrete terms, the Board, through the councils, will focus its efforts on services that will help CDHA members care for, and work with, the public in their communities. For example, the Board will research and provide information on employment and practice issues that will help members create opportunities and identify new dental hygiene practice settings. The Association will also continue with the development of education and practice standards and provide information on scientific issues and research relevant to the practical concerns of dental hygienists.

Members of the Health Promotion Council have identified a need to provide materials to CDHA members that will enable them to initiate and elevate awareness of the need for oral hygiene services in new community and institutional health care settings. They have also recommended increased participation in

'parenting shows' and similar venues to help increase the awareness of oral health care issues amongst the general public. Health Promotion Council members also recommended the Association concentrate on completing the current dental hygiene poster and fact sheet series for the Association's National Dental Hygiene Campaign. This will provide more educational materials to assist the members with an awareness campaign. They have also recommended that the Association focus on developing strategies that actively promote the profession on a continual basis and help the public to recognize and accept oral health as an integral part of overall health. This council also recommended the Association host a session that will promote networking amongst community dental hygienists in conjunction with CDHA's Halifax conference.

The Member Services Council identified a need to provide members with more information on concerns related to self-contracting and other employment issues. They will continue to focus on increasing the Association's membership and attempt to identify new and better ways to service members and meet their growing needs.

The Practice & Regulation Council has recommended CDHA continue to provide financial and other support to those provinces who have not yet achieved self-regulation: Manitoba, Saskatchewan, Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland. To achieve this goal, the council will host a Self-Regulation Workshop in conjunction with CDHA's 6th Annual

Professional Conference and will ensure the participation of at least one representative from the provinces noted. This council has also suggested the Association take an active role to provide the profession's leaders with skills that will strengthen their lobbying abilities.

The Professional Development Council concluded it is important that the Association continues to play a leadership role in dental hygiene education in Canada. It was identified that the Association must continue to support the development of the profession's practice and education standards. In addition, it recommends the Association continue to participate in educational conferences hosted by the American Association of Dental Schools (AADS), the Association of Canadian Faculties of Dentistry (ACFD) and the CDA Teacher's Conference. It has also recommended the Association host an Educator's Workshop in June 1996, in conjunction with CDHA's 7th Annual Professional Conference (Calgary). CDHA's Educator's Directory will be expanded to include researchers.

During the CDHA Board meeting, that followed the council sessions, the Board passed three resolutions. First, it endorsed a position statement on the tax exempt status of dental insurance benefits. Second, it unanimously approved the inclusion of a sexual abuse/disciplinary defense cost rider to the current CDHA malpractice policy, which will be available to all members (details to follow in next *Explorer*). And third, it approved wording changes for updating CDHA member classifications.

CDHA Position Statement on Tax Exempt Status of Dental Insurance Benefits, 1995

The Canadian Dental Hygienists Association (CDHA) believes every Canadian should have access to adequate oral health care. The dental hygiene profession in Canada supports and promotes access to affordable oral health care as an integral component of comprehensive health care.

The guiding principles of the Canadian health system were reaffirmed in the Canada Health Act in 1984 and include universality, public administration, portability, comprehensiveness, and accessibility. Few dental benefits were included under the original health insurance umbrella and these were primarily for the compensation of catastrophic events. The recent impact of reduced federal transfer payments to the provinces has resulted in the erosion of provincial dental programs, and drastically reduced oral health services in the public sector. The oral health of Canadians has suffered because of these decisions. Canadians

have had no choice about the exclusion of oral health services from publicly funded programs.

In the absence of public oral health insurance, many Canadians have sought private dental insurance, frequently negotiated as employee benefits. Any taxation of these employee benefits would result in many employers and employees opting out of existing programs; reduced coverage and increased costs for those on existing plans; and, ultimately an increase in oral disease and oral problems among Canadians.

The Canadian Dental Hygienists Association advocates the inclusion of oral health care as part of comprehensive care in Canada. As an interim measure, the Canadian Dental Hygienists Association supports the tax exempt status of privately insured dental benefits.



ORAL HEALTH FOR THE FUTURE

JASPER PARK LODGE • MAY 25 - MAY 28, 1995

In conjunction with the Alberta Dental Association and the Provincial Convention of the A.D.A.A.

1. Dental Hygiene: Looking Toward the Future

Speaker Panel

Dr. Marlene Forgy
Janice Pimlott
Brenda Walker

2. Stress Management through

Humour & Humour

Catherine Samson (Mott)

3. Dental Hygiene Speaker

T.B.A.

ADHA Conference

Chairperson

Sabrina Heglund

222, 8657 - 51 Avenue

Edmonton, Alberta

T6E 6A8

Phone: 465-1756

New CDHA Board Members Participate in Orientation

During the interim Board Meeting held in Ottawa at the end of January, CDHA introduced four new board members to the Association and its internal organizational structure. Charla Lautar and Diane Skene, two new directors from Alberta, Stephanie Nagle of Ontario and Patricia Noble of Prince George, BC participated in the Association's annual orientation program offered to new directors. In addition, they experienced their first council meetings with CDHA.

Charla Lautar, a resident of Calgary, AB has been appointed to the Professional Development Council. She currently practices community health at Mount View Health Unit in Calgary and has a range of practice experience including education, research, specialty practice, general practice and community health.

Diane Skene, also from Calgary, has been appointed to the Member Services Council. Diane has held numerous association positions at the component and provincial levels and is a past president of the Alberta Dental Hygienists Association.

Diane earned her dental assisting certificate at the Southern Alberta Institute of Technology (SAIT) and her Diploma in Dental Hygiene from the University of Alberta. She currently instructs dental assisting students at SAIT and is working in private practice.



CDHA welcomes new board members (l-r): Stephanie Nagle, Patricia Noble, Diane Skene and Charla Lautar.

Stephanie Nagle of Windsor, ON will sit on the Professional Development Council. Stephanie is a dental hygiene educator at St. Clair College, where she has taught since

1981. She graduated from the University of Toronto's dental hygiene program in 1975 and went on to earn her BSc at the U of T (1978). In May 1994 she completed a Masters in Education at Central Michigan University. Stephanie was Editor of the CDHA Journal from 1978-1984.

Patricia Noble of Prince George, BC has been appointed to sit on the Health Promotion Council. Patricia is a dental hygiene educator at the College of New Caledonia, where she has taught since 1987. She served as the Department Head, Dental Programs at the College from January 1987 to August 1990. She has also taught dental hygiene in Georgia and worked in private practice in New York and Georgia for three years prior to embarking on her teaching career. Patricia holds an Associate in Applied Science degree from SUNY at Farmingdale and a Bachelor of Science Degree from Ohio State University. In 1981 she earned a Masters of Education from the University of Georgia. She also holds a Local Anaesthesia Certificate from the University of British Columbia (1988).

Ontario Francophone Dental Hygienists Form New Organization

In October 1994 a new organization for francophone dental hygienists was formed in Ontario. This followed the receipt of responses to a questionnaire which was sent to 4,480 dental hygienists in Ontario in May of 1993 that indicated 280 dental hygienists in Ontario could offer services in French.

During the inaugural meeting of the Regroupement des hygiénistes dentaires francophones de l'Ontario (RHDFO), which was held in Ottawa, October 21-22, members passed by-laws and formed the Board of Directors. The group's officers include: Linda Bélanger, representing Eastern

Ontario (President), Gisèle Franck, representing Central and Southern Ontario (Secretary/Treasurer), Nicole Labonté representing Northern Ontario and Monique Charlebois, member-at-large.

During the inaugural meeting, members identified the organization's three key roles: to promote communication between members, to provide continuing education opportunities to members (after conducting a survey to determine training needs) and to promote external communications and public relations. (Members attending the inaugural meeting also had an opportunity to partici-

pate in a training session that focused on legal odontology.)

Membership in the RHDFO is open to all dental hygienists who communicate in French and the Regroupement invites all French-speaking dental hygienists to join. Out-of-province hygienists may register as affiliate members. For more information you are invited to contact the RHDFO c/o RIFSSO — C.P. 46041, 444, Yonge St. Toronto, ON M5B 2L8 Or call, (416) 968-6759 or 1-800-265-4399. Fax (416) 968-6838.

Twenty years young — and growing...



Founding members of the New Brunswick Dental Hygienists Association (l-r): Debbie Fraser, Susan Gibson, Chris Robb, Mary Pelletier and Sharyn Milroy.

The New Brunswick Dental Hygienists Association (NBDHA) celebrated twenty years of existence last November in Moncton. Twenty years ago, it had a membership of 12, today it supports a membership of more than 190. CDHA Vice President Sue MacIntosh was in Moncton to bring greetings from the national body. She also provided members with an update on National Certification.



NBDHA President Diane Charron (left) and Vice-President Cathy Howatt cutting the anniversary cake.

CDHA Talks With Parents at Toronto's Annual Parent Show

For a second consecutive year, the Canadian Dental Hygienists Association had an opportunity to meet with the public at Toronto's Annual Parent Show, held in November. Thanks to the generous support of Procter & Gamble, CDHA representatives joined P&G staff at their booth to distribute oral health information. CDHA also wishes to acknowledge the support of dental supplier, Ash Temple, for providing a dental chair for



the booth that attracted the interest of children. This allowed CDHA representatives an opportunity to offer many youngsters their first dental chair riding/sitting experience, thereby giving them a positive oral health care experience.

CDHA representatives, Joan Degan and Wanda Staples distributed fact sheets on



mouth care for infants and toddlers. They were surprised at the prevalence of baby bottle caries amongst the youngsters attending the show. Joan reports that many day care providers asked questions and requested information about baby bottle caries that would enable them to educate parents about this topic. It is indeed encouraging to know that so many children have such conscientious caregivers, but at the same time disturbing that this condition may be present in *other children* whose parents cannot afford access to oral health care.

Dental hygienists may wish to check their own communities to determine if they can provide information on such issues, particularly to new immigrant families or lower income groups that are less able to afford oral health care. CDHA has fact sheets that can assist you in carrying out such tasks. (Note too that this year's National Dental Hygiene Campaign will focus on infants and toddlers.) This is one of many ways dental hygienists can support the growth and development of the profession while being of service to their community too.

News from Other Professional Health Associations

"Creating A New Agenda for Health" theme for Canada Health Day — May 12, 1995

On May 12, public health units and health facilities will celebrate Canada Health Day an event sponsored jointly by the Canadian Public Health Association (CPHA) and the Canadian Hospital Association (CHA). Canada Health Day serves the growing need for better communication between health professionals and the communities they serve.

The event offers Canadian health professionals an opportunity to showcase their work and contributions to health in their own communities. It is a day dedicated to recognizing new developments occurring in different health care fields.

This year the theme is *Creating a New Agenda for Health*, highlighting a broader view of health as an emerging and evolutionary concept in Canada and providing new directions for public policy.

Obituary

Hopewell, Veda: On December 10, 1994, Ms. Hopewell graduated from the University of Toronto's Dental Hygiene program in 1960. She had been practising dental hygiene in Nanaimo, British Columbia prior to her death.



PERIO POWERDONTICS™
EMPOWERING HYGIENE DEVELOPMENT

TEL: (416) 218-5575

One of the Nation's Leaders in Hygiene Development

TRANSFORM HYGIENE PERFORMANCE IN YOUR DENTAL PRACTICE

Start the process now with:

- Customized Soft Tissue Management Programs Implemented into your Practice with One-on-One Training
- Excellence in Diagnosing and Performing Periodontal Therapeutics of the 1990's
- Professional One-on-One Training in Advanced Clinical Skill Refinement
- Positioning Leading Edge Hygiene Technologies into Practice (i.e. Chemical Irrigation, Piezo Scaling, etc.)
- Motivated Team Players, and Increased Patient Acceptance through Empowering your Communication Skills.



PERIO POWERDONTICS™
Post Graduate Hygiene Education
Something For Every Hygienist



Ethical Dilemma

An experienced dental hygienist working for a well-known dentist in a busy city practice encountered the following dilemma. An eight-year-old client arrived at the office for a dental hygiene recall appointment. The child had deficient interdental spacing, which in the hygienist's opinion, appeared to be a potential problem.

The mother said that the child had been to see an orthodontist who wished to place the child in fixed bands now. The bands would then remain on the teeth for at least two years. The mother said she was unsure about getting the bands placed because her daughter did not handle pain well. Her daughter was also worried about having the orthodontic treatment. The mother said that when she asked the dentist if she should get a second opinion, he replied, "No, I don't think so."

The hygienist thought the child was too young to be in fixed bands and while she continued with the hygiene appointment she wondered what she should say to the mother. The hygienist knew that the orthodontist who recommended the bands and the dentist for whom she worked were close friends and furthermore, that the dentist she worked for referred all possible orthodontic clients to this orthodontist. The hygienist would not have recommended this particular orthodontist to any client, and the dentist was aware of how she felt about the orthodontist's work. At the end of the appointment, the mother thanked the hygienist for listening to her. The hygienist's response was, "Everyone deserves a second opinion. Go home and think it over. Call me sometime to tell me what you've decided."

Two days later, the mother called saying that she had decided to get a second opinion and wanted to know who the hygienist would suggest. The hygienist said there were a few orthodontists she would recommend, and she would call to find one who would give the mother a second opinion regarding the child's treatment. The hygienist called an orthodontist whom she regarded as a competent practitioner. This second orthodontist said that for limited treatment cases, orthodontics can be started early if it is **short** term (i.e. six months). The second orthodontist said that this was not the first time he had to deal with a situation like this (i.e. giving a second opinion to the treatment suggested by the other orthodontist). The hygienist called the mother and gave her the number of the second orthodontist. A few weeks later the hygienist received a "thank-you" note from the second orthodontist for doing "nice things for people". He wrote a note inside to say that the child was a straight forward case: serial extraction with fixed bands to be placed at a later date. He accepted the child as a client at the mother's request.

Gather Facts

- Hygienist has several years experience.
- Hygienist has been working for this dentist for several years.
- The dentist is well known with a busy downtown practice.
- The dentist is good friends with the orthodontist and refers all potential orthodontic cases to him.
- The client has deficient interdental spacing which is a problem.
- The orthodontist wants to put the eight-year-old client in fixed bands for approximately two years.
- The mother wants a second opinion.
- The client has a low pain tolerance and is worried about having the orthodontic treatment.
- The hygienist believes the child is too young to be in fixed bands.
- The hygienist would not recommend this orthodontist and the dentist is aware of the hygienist's opinion of the orthodontist to whom he recommends clients.
- The dentist told the mother that he did not think she needed a second opinion.
- The hygienist believes the mother is entitled to a second opinion.

2. Identify Relevant Values (from C.D.H.A. Code of Ethics)

Principle 1: Respect for Persons.

The child's autonomy is compromised due to age.

Principle 3: Veracity and Informed Consent

The client and parent should be advised of all treatment options, and have the right to a second opinion if requested.

Principle 4: Beneficence and Quality Assurance

There is a need to promote "good" for the client.

Principle 5: Justice

The hygienist must ensure competent ethical care for the client.

Explore the Options:

1. The hygienist could say nothing and the client would have the proposed treatment without her mother seeking a second opinion (possibly).

If the hygienist chooses to say nothing, then the mother may feel that she should listen to the dentist and not get a second opinion. The child would have the treatment despite her low pain tolerance and worries. However, the mother may decide to get a second opinion anyway because of both her and her child's concern regarding the treatment offered. Either way, the hygienist has not contradicted the dentist by making suggestions that oppose his opinion that no second opinion is needed; i.e. no "waves" are created. The hygienist may feel guilty that she didn't offer any suggestions to the mother to help her decide what to do.

2. The hygienist could simply tell the mother to seek a second opinion.

If the hygienist simply goes ahead and tells the mother to get a second opinion, the mother may lose trust or confidence in the hygienist or the dentist because of the conflicting opinions of each. The hygienist may cause a problem for herself with the dentist because she went "over his head"; she may lose her job as a result.

3. The hygienist could tell the mother that she thinks the child is too young to have the treatment suggested by the orthodontist, and tell the mother to take the child to a second orthodontist of her recommendation.

If the hygienist tells the mother that she thinks the treatment is inappropriate for the child, and that the child should go to another orthodontist, the hygienist may compromise her position with her employer and possibly create a conflict with the orthodontist. She is not qualified to make decisions regarding orthodontic treatment. However, she will not feel guilty for saying nothing.

4. The hygienist could suggest that the mother get a second opinion and then the mother could choose from alternate treatment plans (if available).

If the hygienist suggests that the mother get a second opinion she will then be able to choose from alternate treatment plans (if available). The mother makes an informed decision: she will either do as the dentist suggested, or she will seek another opinion. The hygienist has not "gone above" the dentist's decision in this case, only suggested that the mother has a right to a second opinion.

5. The hygienist could tell the mother that she won't contradict the dentist by telling the mother to get a second opinion.

If the hygienist tells the mother that she is unable to give a response, she may feel guilty because she has offered the mother no options, even though she did not create waves for herself by contradicting the dentist's response with a conflicting opinion.

Choose:

In this case I would choose Option 4. By simply suggesting to the mother that she could get a second opinion, the dental hygienist has not opposed the dentist's response. The mother must decide on her own whether or not she chooses to seek another opinion. Dental hygienists should respond freely to their clients' requests for more information. You are not required to possess specific qualifications to suggest that someone seek a second opinion. The hygienist is not making a diagnosis or giving a response that is beyond the scope of a dental hygienist.

Act:

The hygienist in this case chose the above option to handle the situation. The mother decided to get a second opinion on her own, and chose to seek alternative treatment with another orthodontist. The hygienist did not interfere with the dentist's decision that a second opinion was not necessary, nor did she give any indication that she felt the original treatment suggested by the orthodontist was inappropriate.

ATTENTION: COMMUNITY HEALTH DENTAL HYGIENISTS, DENTAL HYGIENE EDUCATORS, PROFESSIONAL ASSOCIATIONS...

GOING TO THE DENTIST: A KIT FOR INTEGRATING DENTAL INFORMATION AND LANGUAGE SKILL DEVELOPMENT

Are you or your students involved with helping immigrant or refugee clients to understand:

- ◆ why people seek dental care (not just for pain!)?
- ◆ who provides oral health care?
- ◆ how and where to seek dental care?
- ◆ how to make an appointment?
- ◆ what happens at the "first appointment"?
- ◆ the importance and contents of a health history?
- ◆ what some common dental procedures entail?
- ◆ potential sources for paying for dental care?

*A kit for teachers has been developed by
MANITOBA CULTURE, HERITAGE AND CITIZENSHIP
which includes:*

- ◆ **MANUAL:** 62 pages, including 9 lessons with objectives, materials needed, vocabulary, dental content, lesson plans with suggested activities and 16 reproducible worksheets
- ◆ **COLOR PHOTOGRAPHS:** 50 - 8x10 laminated real-life photos to coordinate with the content and worksheets in the manual
- ◆ **VISUALS:** 10 laminated visuals related to paying for dental care (e.g. fee-for-service, assistance, insurance)
- ◆ **"REALIA":** 11 dental supplies accompanied by a brief description (gloves, mask, X-ray, saliva ejector, etc.)

The entire kit can be purchased for \$195.00, or in separate components:
manual - \$40.00, 50 color photographs - \$125.00, 10 visuals - \$25.00,
realia \$15.00 (plus shipping)

For further information, or if interested in purchasing the kit, contact:
Mickey Wener, 6 Exmouth Blvd., Winnipeg, MB, R3P 0C1,
ph: (204) 885-7180, FAX: (204) 896-0983

INTERNATIONAL ASSOCIATION FOR ORTHODONTICS

ORTHODONTIC SEMINARS hygienists/assistants/receptionists

Philosophy • Records • Radiography
• Photography • Patient Education
• Appliances • Straight Wire • Mechanics
• Bracketing/Banding • Hands on
Lab Exercises • Case Presentation
• Team Building • Marketing • Informed
Consent • Financial Arrangements
• A R Control • Ortho Letters and Forms
• Fun!

JUNE WILLIAMSON, R.D.H.

HEATHER MOLLER, P.D.A., B.A.

(519) 455-4110

*Courses offered in several Canadian and American cities.
Register today in a city near you.*



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

Your Professional Partner

CALL FOR CDHA VOLUNTEER CORPORATE RELATIONS OFFICER

As Corporate Relations Officer for CDHA you will employ your interpersonal and communications skills, marketing ability and initiative to:

- act as liaison between CDHA and the dental industry with respect to public relations, advertising, sponsorship
- promote CDHA projects, activities and events to companies
- co-ordinate dental hygiene projects with funding from sponsors
- work with CDHA councils to identify projects suitable for corporate sponsorship, provide lists of companies and contact names, and advise on corporate protocol and funding mechanisms.

This position, open to CDHA members, begins in June 1995. Orientation to the position will be provided. You will be invited to attend the CDHA Planning Session in Ottawa, January 1996.

All expenses for this position are covered by CDHA.

Please send a résumé with covering letter by April 30, 1995 to:

Canadian Dental Hygienists Association
Attn: Maxine Borowko, President
96 Centrepointe Drive, Nepean, ON K2G 6B1

PerioREPORTS

Bi-monthly publication which summarizes periodontal research of specific interest to clinicians. Easy to read format keeps you up to date on the latest research findings. Journals reviewed for Perio REPORTS include:

Journal of Periodontology
Journal of Clinical Periodontology
Journal of Periodontal Research
Journal of Dental Research
Periodontal Abstracts
Quintessence International
J of Periodontics and Restorative Dent
JADA, JADHA
and many more

☐ Please send sample issue for my review

☐ \$48 one-year
☐ \$84 two-year

Name _____
Address _____

City _____
Prov _____ Postal Code _____

Mail to: Perio REPORTS
Box 52090, 311 - 16th Ave. NE
Calgary, Alberta, T2E 8K9

PERIDEX® (CHLORHEXIDINE GLUCONATE 0.12%)

PERIDEX ORAL RINSE
(Chlorhexidine Gluconate 0.12%)
Antigingivitis Oral Rinse

ACTIONS, CLINICAL PHARMACOLOGY: Peridex Oral Rinse (0.12% Chlorhexidine Gluconate) or Peridex provides antimicrobial activity during oral rinsing which is maintained between rinsings. Microbiologic sampling of plaque has shown a general reduction of both aerobic and anaerobic bacterial counts ranging from 54-97% through six months' clinical use. Rinsing with Peridex inhibits the buildup and maturation of plaque by reducing certain microbes regarded as gingival pathogens, thereby reducing gingivitis. Peridex provides antimicrobial activity during rinsing and for several hours thereafter.

No significant changes in bacterial sensitivity, overgrowth of potentially opportunistic organisms or other adverse changes in the oral microbial flora were observed following the use of Peridex for six months. Three months after Peridex use was discontinued, the number of bacteria in plaque had returned to pre treatment levels and sensitivity of plaque bacteria to chlorhexidine gluconate remained unchanged.

Studies conducted with human subjects and animals demonstrate that any ingested chlorhexidine gluconate is poorly absorbed from the gastrointestinal tract. Excretion of chlorhexidine gluconate occurred primarily through the feces (approximately 90%). Less than 1% of the chlorhexidine gluconate ingested by these subjects was excreted in the urine.

INDICATIONS AND CLINICAL USE: Peridex is indicated for use as part of a professional program for the treatment of moderate to severe gingivitis, and for management of associated gingival bleeding and inflammation between dental visits. For patients having coexisting gingivitis and periodontitis, see PRECAUTIONS.

CONTRAINDICATIONS: Peridex should not be used by persons who are known to be hypersensitive to chlorhexidine gluconate or other formula ingredients.

WARNINGS:
USE IN PREGNANCY: Reproduction and fertility studies with chlorhexidine gluconate have been conducted. No evidence of impaired fertility was observed in male and female rats at doses up to 100 mg/kg/day, and no evidence of harm to the fetus was observed in rats and rabbits at doses up to 300 mg/kg/day and 40 mg/kg/day, respectively. These doses are approximately 100, 300, and 40 times that which would result from a person ingesting 30 ml (2 capsules) of Peridex (0.12% chlorhexidine gluconate) per day. Since controlled studies in pregnant women have not been conducted, the benefits of use of the drug in pregnant women should be weighed against possible risk to the fetus.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. In parturition and lactation studies with rats, no evidence of impaired parturition or of toxic effects to suckling pups was observed when chlorhexidine gluconate was administered to dams at doses that were over 100 times greater than the dose which would result if a person ingested the entire recommended dose of Peridex (0.12% chlorhexidine gluconate) on a daily basis.

USE IN CHILDREN: Since the safety and efficacy of Peridex in children has not yet been fully established, the benefits of its use should be weighed against the possible risks.

PRECAUTIONS:

1. For patients having coexisting gingivitis and periodontitis, the absence of gingival inflammation following treatment with Peridex may not be indicative of the absence of underlying periodontitis. Appropriate treatment of periodontitis is therefore indicated.

2. Peridex may cause staining of oral surfaces such as the film on tooth surfaces, restorations, and the dorsum of the tongue. Stain will be more pronounced in patients who have heavier accumulations of unremoved plaque.

Stain resulting from use of Peridex does not adversely affect the health of gingivae or other oral tissue. Stain can be removed from most tooth surfaces by conventional professional prophylactic techniques. Additional time may be required to complete the prophylaxis.

Discretion should be used when treating patients with exposed root surfaces or anterior facial restorations with rough surfaces or margins. If natural stains cannot be removed from these surfaces by a dental prophylaxis, patients should be excluded from Peridex treatment if the risk of permanent discoloration is unacceptable. Stains in these areas may be difficult to remove by dental prophylaxis and on rare occasions may necessitate replacement of these restorations.

3. A few patients may experience a slight and temporary alteration in taste perception while undergoing treatment with Peridex. Most of these patients accommodate to this effect with continued use of Peridex.

4. For maximum effectiveness the patient should avoid rinsing their mouth, eating or drinking for about 30 minutes after using Peridex.

ADVERSE REACTIONS: No serious systemic reactions associated with use of Peridex were observed in clinical testing. However, some adverse reactions have been reported in studies with Peridex or other chlorhexidine-containing mouth rinses. The most common side effects associated with chlorhexidine gluconate oral rinses are (1) an increase in staining of oral surfaces, (2) an increase in supra gingival calculus and (3) a slight and temporary alteration in taste perception. (see PRECAUTIONS). Epithelial irritation and superficial desquamation of the oral mucosa have been noted in studies of children using 0.12% chlorhexidine gluconate which were reversible upon discontinuation.

There have been rare cases of parotid gland swelling and inflammation of the salivary glands, in patients using Peridex.

SYMPTOMS AND TREATMENT OF OVERDOSAGE: Ingestion of 30 or 60 ml of Peridex (0.12% chlorhexidine gluconate) by a small child (10 kg or less body weight) might result in gastric distress, including nausea, or signs of alcohol intoxication. Medical attention should be sought if more than 120 ml of Peridex is ingested by a small child or if signs of alcohol intoxication develop.

DOSAGE AND ADMINISTRATION: Peridex therapy should be initiated directly following a dental prophylaxis. Patients using Peridex should be reevaluated and given a thorough prophylaxis at intervals no longer than six months; they should be referred for periodontal consultation as necessary.

Recommended use is twice daily oral rinsing for 30 seconds, morning and evening after tooth brushing. Usual dosage is 15 mL (marked in cap) of undiluted Peridex. Peridex is not intended for ingestion and should be expectorated after rinsing. Rinsing the mouth, eating or drinking should be avoided for about 30 minutes after using Peridex.

The suggested initial course of therapy is 3 months, at which time patients should be recalled for evaluation. At the time of the recall visit, the dental professional should:

- Evaluate progress, remove any stain, and reinforce proper home care techniques.
- If gingival inflammation and bleeding is controlled, discontinue Peridex therapy and recall the patient in three months to assess gingival health.
- If gingival inflammation and bleeding persists, continue Peridex therapy for an additional 3 months and schedule a three-month recall for evaluation.
- Evaluate for evidence of epithelial irritation, desquamation and parotitis.

The following generally accepted grading scheme may be of use in evaluating the severity of gingivitis.

Loe and Silness
GINGIVAL INDEX (GI)

Grade	Description
1	Normal gingiva, no inflammation, no discoloration, no bleeding.
2	Mild inflammation, slight color change, mild alteration of gingival surface. No bleeding.
3	Moderate inflammation, erythema, swelling, bleeding on probing or when pressure applied.
4	Severe inflammation, severe erythema and swelling, tendency toward spontaneous hemorrhage, some ulceration.

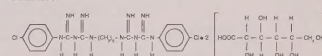
An occasional missed dose can be ignored if the patient is generally compliant with the prescribed regimen.

PHARMACEUTICAL INFORMATION DRUG SUBSTANCE

Proper Name: Chlorhexidine gluconate (U.S.A.N.)

Chemical Name: 1,1'-hexamethylene bis (5- (p-chlorophenyl) biguanide) di-chloride

Structure:



Molecular Weight: 897.8

Description:

Chlorhexidine has basic character and exists in the di-cationic form at physiologic pH. The two protonic positive charges become somewhat localized on the bi-guanide portion of the molecule. Both pK_a's are reported as 10.78 ± 0.06. The gluconate salt is soluble in excess of 70% (w/v) in water at 20°C.

At 19-21% w/v chlorhexidine gluconate solution is colorless to pale straw-colored and is odourless to almost odourless (British Pharmacopoeia).

COMPOSITION: Peridex contains 0.12% chlorhexidine gluconate in a base containing water, alcohol, glycerin, PEG-40 sorbitan di-isostearate, flavour, saccharin sodium and FD&C Blue #1 Dye.

STABILITY AND STORAGE: Store above freezing (0°C).

INCOMPATIBILITIES: None known.

SPECIAL INSTRUCTIONS: None.

AVAILABILITY OF DOSAGE FORM: Peridex oral rinse (0.12% chlorhexidine gluconate) is supplied as a blue liquid in 475 mL amber plastic bottles with child-resistant dispensing closures.

Store above freezing (0°C).

REFERENCE

- Grossman E., Reiter G., Sturzenberger OP, et al. Six-month study of the effects of a chlorhexidine mouthrinse on gingivitis in adults. *Journal of Periodontal Research*. 1986;21(suppl 16):33-43.

© Peridex is a registered trademark of the Procter & Gamble Company. Procter & Gamble Inc., licensee

Product Monograph available upon request:

Procter & Gamble Inc.

P.O. Box 355, Station A
4711 Yonge Street
Toronto, Ontario
M5W 1C5

PAAB

The Dental Hygienist's Role in Screening for Oral Cancer

By/par:

L. Cormier, Dip DH and C.L.B. Lavelle, DDS, MBA, FRC.Path
School of Dental Hygiene, University of Manitoba

Le rôle de l'hygiéniste dentaire dans le dépistage du cancer buccal

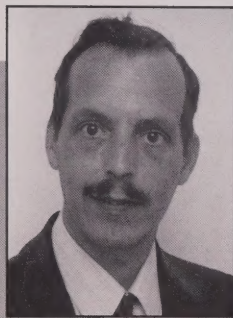
Introduction

Oral malignancies are potentially devastating. Commonly presenting initially as an indolent ulcer on the lips, floor of mouth, palate, gingiva, buccal mucosa, oropharynx and tongue, such lesions are usually amenable to surgical excision (cure). However, they are generally diagnosed at a later stage, when adjacent bone invasion and cervical lymphadenopathy have also occurred. Treatment options at the later stage include wide surgical tumour excision, radical neck dissection (extirpation of the cervical lymph nodes) and chemo- or radio-therapy. Furthermore, although distant lung, liver or bone metastases are rare, palliative chemo- or radio-therapy may be the only option when malignancies are diagnosed at a late stage of development.

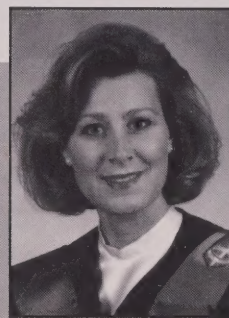
Approximately nine out of every ten oral malignancies comprise squamous cell carcinomas, so the early screening of these slow growing tumours is crucial. Dental hygienists have a responsibility to ensure all new and recall patients are screened for oral malignancies, especially those at high-risk. The primary intent of this article is to discuss the etiology, signs and symptoms of oral cancer and to discuss how effective screening strategies will not only enhance the well-being of patients but also help to reduce the burgeoning costs of healthcare caused by this disease.

The Nature of the Problem

The potential impact of oral malignancies can be readily discerned from epidemiological data. These show that the mortality (number of deaths) from tongue and mouth malignancies alone, nearly equals those from cervical cancer.¹ Moreover, mortality estimates are nearly double those for the cervix with inclusion of gingival, tonsillar and pharyngeal malignancies.² Oral malignancies are more common than those of the pancreas, stomach, skin (e.g. melanoma)³ or larynx.⁴ However, current oral screening practices seem to be ineffective because the majority of cases are diagnosed at later stages of development.



**C.L.B. LAVELLE, DDS, MBA,
FRC. PATH**



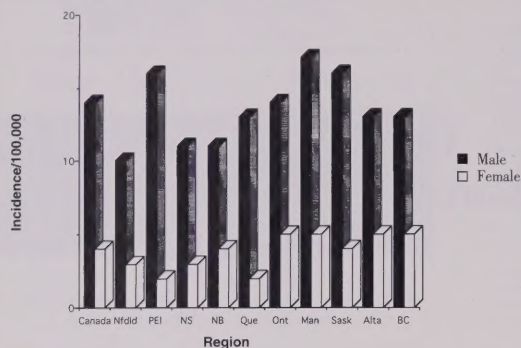
L. CORMIER, DIP DH

Introduction

Les affections malignes peuvent être dévastatrices. Ces lésions ont souvent au début l'apparence d'ulcères sur les lèvres, le plancher buccal, le palais, les gencives, la muqueuse buccale, l'oropharynx ou la langue et leur traitement relèvent ordinairement de l'excision chirurgicale. De façon générale, cependant, quand on les diagnostique, elles ont atteint un stade plus avancé; l'invasion de l'ossature adjacente et la lymphadénopathie cervicale sont apparentes. À ce stade, les choix de traitement comprennent une large excision chirurgicale de la tumeur, une dissection radicale du cou (extirpation des ganglions latéraux du cou), la chimiothérapie ou la radiothérapie. Pire encore, même s'il est rare que des métastases à distance affectent les poumons, le foie ou l'ossature, la chimiothérapie ou la radiothérapie palliative est peut-être la seule option quand on dépiste des affections malignes à un stade avancé.

Approximativement, neuf affections malignes sur dix comprennent des épithéliomas épidermoïdes spino-cellulaires, d'où l'importance cruciale du dépistage rapide de ces tumeurs à croissance lente. Il incombe aux hygiénistes dentaires de veiller à ce que les patients, nouveaux et anciens, surtout ceux qui sont à risque élevé, soient examinés pour dépister toute affection maligne buccale. Cet article a d'abord pour objet de décrire l'étiologie, les signes et les symptômes du cancer buccal et de démontrer que l'efficacité des stratégies de dépistages ne fera pas qu'améliorer le bien-être des patients mais qu'elle aidera aussi à réduire les coûts en expansion des soins médicaux occasionnés par cette maladie.

Figure 1: Regional Differences in the Incidence of Oral Cancer in Canada

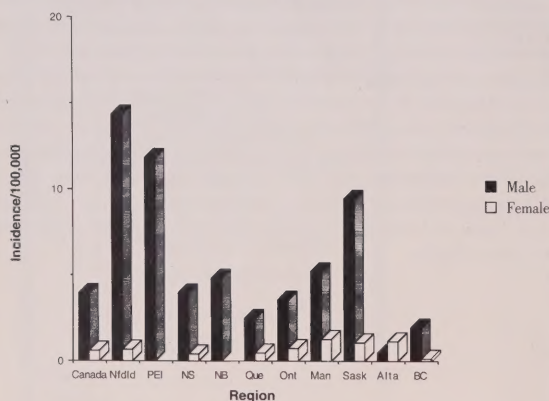


Age-standardized incidence rates/100,000.
Data abstracted from Gaudette LA, Illing EM, Hill CB. Canadian cancer statistics.
1991 Health Reports 3: 107-135.

The urgency of this problem cannot be overstated. Oral malignancies are more prevalent in males than females³ (Figure 1), although there have been recent changes. For instance, when adjusted for age, the prevalence of oral malignancies in males remained stable (14.5-14.8 per 100,000) from 1935 to 1964, but then decreased to 10.9 per 100,000 from 1964-1985.⁶ Analogous data for females, however, have shown steady increases from 1.4 per 100,000 in the 1930s to 4.1 per 100,000 in the 1980s.⁶ Furthermore, there has been a four-fold increase in the incidence of oral malignancies in 30-39 year old males between 1960 and the present. A similar trend is not evident in females.⁶ The incidence of lip cancer is higher in Newfoundland than other parts of the country⁷ (Figure 2). Although these somber statistics may improve with closure of the fisheries,⁸ the fact that the lower rather than upper lip is primarily affected supports the association between sun exposure as an etiologic factor for carcinoma of the lip.

Unfortunately, most oral malignancies are diagnosed at an advanced developmental stage and their incidence, mortality or survival rates have not changed over the past 11 years.¹ These data are particularly disconcerting, since approximately 90% of oral malignancies are

Figure 2: Regional Differences in the Incidence of Malignancies of the Lip in Canada



Age-standardized incidence rates/100,000.
Data abstracted from Gaudette LA, Illing EM, Hill CB. Canadian cancer statistics.
1991 Health Reports 3: 107-135.

Table I: Etiologic Factors Associated with Oral Cancer

Physical agents

Chronic irritation from rough margins of restorations, cavities or appliances.
Traumatic habits (e.g. chronic pipe smoking, cheek biting).

Age

The prevalence of oral malignancies increases with age. Tobacco abuse in adolescents may lead to their assignment to high-risk groups

Thermal and chemical factors

Prolonged exposure to sunlight
Tobacco (cigarettes, cigars, pipes, smokeless tobacco)
Alcohol, especially spirits
Betel nut

Microbial factors

Herpes simplex virus
Papillomavirus
Cytomegalovirus
Epstein-Barr virus
Human immunodeficiency virus (HIV)
Candida albicans
Treponema pallidum (Tertiary syphilis)

Other factors (still under debate)

Iron deficiency
Lichen planus
Mouthwash containing more than 25% alcohol¹⁴
Nitrite-containing meats¹⁵
Vegetable oils¹⁶
Defective immune system (congenital, acquired)¹⁷
Chronic physical trauma

Occupations

Machine operators
Plumber
Building, textile and electrical workers
Formaldehyde workers¹⁸

Dental status (second stage, promoting factors)

Poor oral hygiene (calculus, periodontal destruction etc.)
Dental neglect¹³
Poor dentistry

epithelial in origin developing from the tissues lining the oral cavity and lower lip. The remaining malignancies arise from salivary (major and minor) glands and other tissue types (e.g. sarcomas and lymphomas),⁵ whereas about 1% are metastatic from other regions of the body.⁹ Most oral malignancies therefore arise from regions of the mouth accessible to physical examination¹⁰ (i.e. the floor of the mouth, ventrolateral aspect of the tongue and soft palate complex).¹¹ This underscores the importance of screening to ensure their early diagnosis.

The Etiology of Oral Malignancies

Although genetic factors may be implicated, the etiology of all malignancies (including oral malignancies) remains largely obscure.^{3,12}

There are many factors, however, more closely associated with the induction of oral malignancies (Table I). For example, sun and smoking are closely correlated with lip malignancies.¹⁹ Whereas congenital or acquired immune defects are linked to an increased prevalence for intraoral malignancies, organ transplant patients are prone to lower lip malignancies and oral lymphoma²⁰ and Kaposi's sarcoma and non-Hodgkin's lymphoma are more prevalent in patients with acquired immune deficiency syndrome (AIDS).¹² Furthermore, the human papilloma and herpes simplex viruses are implicated in the etiology of oral malignancies,^{17,21,22} while other viruses have been identified with Burkitt's lymphoma and Kaposi's sarcoma. The association of *Candida albicans* and oral malignancies is well established²³ and may be involved with the malignant transformation of erythroplakic and leukoplakic lesions,¹² although the nature of this association remains controversial. Although oral malignancies are associated with multiple carcinogenic (oncogenic) factors, this does not preclude the identification of high-risk patients.

High Risk Patients

The greater prevalence for oral malignancies in tobacco and alcohol abusers²⁴ indicates a certain high-risk group. This is confirmed by a study of US Veterans, in which oral squamous cell carcinomas were detected in approximately 1:1000 patients.²⁴ The detection rate increased to 1:200 in tobacco and alcohol abusers over the age of 40 years, and 1:7 for those with a previous history of oral cancer.²⁴ Although the prevalence of oral malignancies closely correlates with the degree of tobacco abuse,^{25,26} the specific oncogenic factor(s) has yet to be delineated. A number of polycyclic hydrocarbons known to be carcinogenic have been isolated in tobacco, but oral malignancies do not occur in all tobacco abusers, complicating predictions of those who might be affected in the future. Until reliable predictions are possible, regular screening should be mandatory for tobacco abusers. Smokeless tobacco abuse by adolescents and some professional athletes is a particular worry in this regard,²⁶ and can be considered as other high-risk patient groups who may need regular oral screening.²⁷

Alcohol abusers also comprise a high-risk group, but the primary oncogenic factor of this group remains obscure. It is not known whether the increased prevalence for oral malignancies results from greater mucosal permeability, the presence of carcinogenic congeners, nutritional deficiencies, induced immune defects or liver disease. Even more disturbing is the forty-fold increase in oral malignancies in those patients who abuse both tobacco and alcohol.^{28,29} Here again the prime etiologic factor(s) remains unidentified.

Regular screening for high-risk patients is crucial because most oral malignancies are asymptomatic. Furthermore, oral malignancies are associated with many oncogenic factors, the relative contributions of which remain unidentified. Even when 94% of patients with oral malignancies were seen by healthcare professionals within the previous year,¹ the screening did not always identify all tumours. **Dental hygienists and other healthcare professionals must be more aware of the potential signs and symptoms of early premalignant and malignant changes to ensure screening efficiency, while avoiding the potential for inducing cancerphobia in patients.**

Clinical Signs

Oral malignancies commonly present as: a white and/or red patch; an exophytic mass; an ulceration; a raised granular lesion or a varied combination. Ulcerated lesions generally have raised margins that feel indurated on palpation. White lesions with erythematous patches are more prone to malignant transformation than homogeneous white lesions.¹² Lip malignancies are unlikely to metastasize, however a significant proportion of tongue malignancies have regional or distant metastases at the time of diagnosis. About 35-40% of patients with floor

of the mouth or tongue malignancies subsequently develop distant metastases.³ In advanced malignancies of the tongue, hypoglossal nerve involvement with atrophy and tremour of the tongue, may be the main presenting features. Palatal malignancies may lead to unilateral soft palate paralysis and loss of the gag reflex due to incorporation of the glossopharyngeal and/or vagus nerves. Areas of leukoplakia (keratotic plaque), leukoplakia with erythema and erythroplakia (velvety red or granular red macule or patch) must also be biopsied for histopathological evaluation, as they are so prone to premalignant or malignant change.¹² When these areas present on the gingiva, the avoidance of misinterpretation as gingivitis or periodontitis requires particular diligence. Oral malignancies have extremely varied manifestations, therefore any lesion without an obvious local (dental) etiology must be viewed with suspicion until a diagnosis has been established.

Clinical Symptoms

Oral malignancies tend to be associated with symptoms late in their development, that are remarkably varied. Pain may be significant in advanced lesions, while those in the posterior areas of the oral cavity may interfere with the passage of food (weight loss) and air (difficulty in breathing). Other symptoms may also include hoarseness, dysphagia, intractable ulcers, bleeding, numbness, tooth mobility and progressively poor denture retention. As only advanced oral malignancies tend to be symptomatic, regular screening is primarily intended to facilitate earlier diagnosis.

Regular screening for high-risk patients is crucial because most oral malignancies are asymptomatic...

Location of Intraoral Malignancies

Since most malignancies develop on the mucosal lining of the oral cavity, they may be effectively screened visually or by palpation. Malignancies on the upper lip and dorsum of the tongue are rare, relative to those of the lower lip, while the vast majority develop on the floor of the mouth, lateral and ventral surfaces of the tongue, the soft palate and adjacent tissues. Malignancies of the maxillary mucosa are not as prevalent as those in the mandibular region but are potentially more devastating due to their predilection for metastasis. Generally, the prognosis of malignancies in the posterior of the oral cavity is poorer than those in more anterior locations, although any lesion requires urgent treatment.

Clinical Outcome for Patients with Oral Malignancies

Improved screening for oral malignancies would benefit many patients, although the prognosis also depends on various intrinsic and extrinsic factors. In addition to the stage of the lesion at the time of diagnosis,³⁰ the degree of differentiation of the tumour, the site of the primary tumour and the adequacy of initial therapy will critically impact on the prognosis of patients. Extrinsic factors, such as age, dietary, social habits and the Karnofsky performance status³¹ (i.e. the patient's ability to cope with the disease) can also be involved. Furthermore, since survival does not solely depend on tumor stage, early diagnosis cannot guarantee a favourable prognosis. Nevertheless, only a guarded prognosis is possible with the late diagnosis of a malignancy.

*Most deaths occur within two years of diagnosis. Therefore, the early detection of oral malignancies is more likely to improve the prognosis of patients than therapeutic advances.*³² Five-year survival rates

depend mainly on the age and general health of the patient at the time of diagnosis.³² However, oral malignancies may occur in apparently young, fit patients. The associated morbidity may be reduced by reconstructive and rehabilitative therapy but costs to both patients and healthcare budgets are significant. In fact, the prognosis of patients with oral malignancies will only be improved when routine oral screening is accepted with the same familiarity as the Pap smear for women.

Many factors dictate the types of therapy for patients (Table II). Early diagnosis is associated with a greater range of options. The primary therapeutic goal is to maximize survival and improve the quality of life (Table III). Palliative treatment is the only option when tumours are diagnosed at a later stage. In view of the scant improvement in the five-year survival rates of patients with oral malignancies,³ the need for more effective screening cannot be overstated.

Table II: Factors Influencing Treatment Modalities for Patients with Oral Malignancies

- size of lesion;
- location of lesion;
- presence of regional or distant spread;
- degree of histopathologic differentiation;
- cosmetic and functional problems involved with rehabilitation;
- acceptance of recommended procedures by the patient.

Table III: Goals for the Treatment of Patients with Oral Malignancies

- early treatment of primary lesions;
- sound management of premalignant lesions;
- use of effective therapeutic measures to produce the least disabling and disfiguring changes;
- early application of measures to facilitate full rehabilitation;
- selection of effective palliative measures where cure is no longer an option.

The Need for Effective Screening and Detection Strategies

Squamous cell carcinoma is the most prevalent oral malignancy. These tumours usually grow slowly and at least 75% occur at sites readily visualized and/or palpated during a routine oral examination. Yet the oral cavity receives, at best, a cursory examination by medical personnel and oral mucosal surfaces are often given little more attention by dental professionals. New strategies must be devised to encourage patients, particularly those at high risk, to seek regular screening.³³ Unfortunately, screening alone cannot reliably discriminate oral malignancies from other lesions. This is due to misleading signs and symptoms, a low index of suspicion and the examiner's unfamiliarity with tumors. Without regular screening, however, malignancies will continue to be diagnosed at late developmental stages.

Since less than 40% of oral malignancies are diagnosed at a stage amenable to surgical excision (cure), there is need to refine the screening process. Early malignancies are generally asymptomatic and exhibit minimal mucosal changes, so they may easily escape detection. Generally, most patients do not seek care until their lesions exceed 1 cm in diameter. By then, more than 50% of oral malignancies exhibit cervical lymphadenopathy at diagnosis.³⁴ At this stage palliative treatment is the only option. Oral malignancies less than 1 cm are amenable to surgical excision (cure). In 30-40% of the population, five-year survival rates apply to most lesions (excluding the lip) greater than

1 cm.³⁵ Five-year survival rates of well-established oral malignancies can never be optimistic,³⁶ because many other factors may also be involved (e.g. age of the patient).

Table IV: Potential Malignant and Non-malignant lesions to be Noted During a Routine Oral Examination

Potentially malignant	Non-malignant
Leukoplakia	Aphthous ulceration
Erythroplakia	Traumatic ulceration
Lichen planus	Frictional keratosis
Lupus erythematosus	Geographic tongue
Submucous fibrosis	Median rhomboid glossitis
Stomatitis nicotina	Pseudomembranous candidosis
Actinic keratosis	

Techniques for Oral Screening

With observer training, oral mucosal screening can be sufficiently sensitive to detect most early malignant or premalignant lesions.³⁷ **Primary healthcare workers in Sri Lanka have been shown to be effective for screening referable (oral premalignant and malignant) lesions with a 90% sensitivity and a 58% positive predictive value.**³⁸ In the field, the criteria for a positive test are clear and unequivocal white or red patches or ulcers. Screening can be performed in a short time using gloved hands, tongue depressors, cotton gauze and a good light source. A thorough evaluation of the oral mucosa could be performed on all new dental patients entering the practice, it should become an integral component of recall examinations, especially for those at high-risk for oral malignancies.

After removal of dentures or other intraoral appliances (including chewing gum/tobacco), the entire oral mucosal lining should be methodically inspected under good lighting conditions. The sequence of the exam should be systematic and involve the everted lips, upper and lower gingiva, right and left buccal mucosa, palate and oropharynx, dorsum and lateral borders of the tongue and floor of the mouth. Due to their prevalence for malignant change, an examination of the floor of the mouth, and both inferior and lateral borders of the tongue, is particularly important. All mucosal lesions should be identified and noted. A biopsy and/or referral may be required to identify premalignant and malignant lesions (Table IV). Both sides of the neck should be palpated, with particular reference to firm painless swellings (lymphadenopathy) in the submental, sublingual and cervical lymphatic chains. **The main responsibility of the dental hygienist is to record all intra-oral observations in the patients' chart and inform the dentist of possible malignant signs and symptoms (Table V) so their prompt treatment or referral can be assured.**

Table V: Main Screening Criteria when Screening for Oral Malignancies

- ulceration, swellings
- changes in color or texture
- bleeding
- pain
- anesthesia in any mucosal region without an obvious local etiology or continues for more than 14 days following removal of apparent etiologic factor(s)

Continued on page 58



9312MG500

3M *Innovation*

The Role of Tolonium Chloride in Oral Cancer Screening

Since most oral malignancies can be identified 3-7 months earlier by trained observers,³⁹ the toluidine blue test (TCL or toluidine blue test) — marketed as Ora Scan (Zila Pharmaceuticals Inc.) — is a useful screening refinement. TCL is a vital dye that selectively stains the acid components (DNA and RNA) of malignant tumors an intense blue. In addition to facilitating the detection of early malignancies, TCL is useful for delineating the surgical fields for biopsy sites, second primary and satellite tumors, as well as post-surgical and post-irradiation tumor recurrences.⁴⁰⁻⁴³ Tolonium chloride has been used for many years to detect cervical malignancies, so applications to the oral mucosa are logical to improve screening efficiency. The sensitivity of the TCL test ranges from 86-100% with a 70-100% specificity⁴⁴ and the value improves as the prevalence of oral malignancies increases (e.g. for high-risk patients). Although there are 20-73% false-negatives when used in the Pap smear,^{45,46} it is still accepted for screening test. Yet this same TCL test is not accepted for oral screening, due to false-positive arising from dye adherence to inflamed or traumatized areas. To avoid such concerns, patients testing positive should be rescreened ten days later, when non-malignant and traumatic lesions should be healed.⁴⁷ This is the approach adopted for screening of the cervix^{45,46} and should also be applied for oral screening in patients at high-risk, i.e. patients 45 years and older,³⁸ who abuse tobacco⁴⁷ and alcohol.¹¹ The TCL test is a valuable adjunct for screening high-risk populations, but should never replace visual and manual examinations of new and recall patients.

Conclusion

- Regular screening for oral malignancies is a major responsibility for dental hygienists and all other healthcare professionals, especially for high-risk patients.
- Visual examination of the oral mucosa and palpation of the cervical lymph nodes is effective, if performed meticulously. The TCL test is a useful screening adjunct and a tool for patient education.
- The hygienist has a prime responsibility to educate adolescents regarding tobacco abuse so they do not become a high-risk group for oral malignancies.
- New strategies must be devised to encourage all patients, especially those in high-risk groups, to seek regular oral screening.

References

1. Smart, C.R.: Screening for cancer of the aerodigestive tract. *Cancer* 1993, 72: 1061-1065.
2. Nally, F., Hindle, I.: Oral cancer; is it more common than cervical? *Br Dent J* 1991, 170: 323-324.
3. Boring, C.C., Squires, T.S., Tong T.: Cancer statistics, 1992. *CA* 1992, 42: 19-38.
4. Gaudette, L.A., Illing, E.M., Hill, G.B.: Canadian cancer statistics. *Health Reports* 1991, 3: 107-135.
5. US Department of Health, Education and Welfare: Management guidelines for head and neck cancer. Public Health Service Publ No. 80-2037, 1979.
6. Chen, J.K., Eisenberg, E., Krutchkoff, D.J., Katz, R.V.: Changing trends in oral cancer in the United States, 1935 to 1985: a Connecticut study. *J Oral Maxillofac Surg* 1991, 49: 1152-1158.
7. Main, J.H.P., Pavone, M.: Actinic cheilitis and carcinoma of the lip. *J Canad Dent Assoc* 1994, 60: 113-116.
8. Binnie, W.H., Rankin, K.V.: Clinical and Pathologic Considerations. In: Wright, B.A., Wright, J.M., Binnie, W.H. eds. *Oral Cancer*, Boca Raton, FL: CRC Press, 1988, p. 3.
9. Zacharides, N.: Neoplasmas metastatic to the mouth, jaws and surrounding tissues. *J Craniomaxillofac Surg* 1989, 17: 283-290.
10. Chido, G.T., Eigner, T., Rosenstein, D.I.: Oral cancer detection: The importance of routine screening for prolongation of survival. *Postgrad Med* 1986, 80: 231-236.
11. Mashberg, A., Barsa, P.: Screening for oral and oropharyngeal squamous carcinomas. *CA*, 1984, 34: 262-268.
12. Silverman, S. Jr. ed. *Oral Cancer* ed 2, New York: American Cancer Society, 1985.
13. Maier, H., Zoller, J., Herrmann, A., et al.: Dental status and oral hygiene in patients with head and neck cancer. *Otolaryngol Head Neck Surg* 1993, 108: 655-661.
14. Zunt, S.L., Beiswanger, B.B., Niemann, S.S.: Mouthwash and oral cancer. *J Indiana Dent Assoc* 1991, 70: 16-19.
15. Gridley, G., McLaughlin, J.K., Block, G., et al.: Diet and oral and pharyngeal cancer among blacks. *Nutr Cancer* 1990, 14: 219-225.
16. Herbert, J.R., Landon, J., Miller, D.R.: Consumption of meat and fruit in relation to oral and pharyngeal cancer: A cross-national study. *Nutr Cancer* 1993, 19: 169-179.
17. Gerson, S.J. *Oral cancer. Crit Rev Oral Biol Med* 1990, 1: 153-166.
18. Merletti, F., Boffetta, P., Ferro, G., et al.: Occupation and cancer of the oral cavity or oropharynx in Turin, Italy. *Scand J Work Environ Health* 1991, 17: 248-254.
19. Winn, D.M.: Smokeless tobacco and cancer; the epidemiologic evidence. *CA* 1988, 38: 236-243.
20. Penn I.: Occurrence of cancers in immunosuppressed organ transplant recipients. In: Terasaki, P. ed. *Clinical Transplants*, Los Angeles: UCLA Tissue Typing Laboratory, 1990, pp. 53-62.
21. Chang, F., Syrjanen, S., Kellokoski, J., Syrjanen, K.: Human papillomavirus (HPV) infections and their association with oral disease. *J Oral Pathol Med* 1991, 20: 305-317.
22. Steele, C., Shillitoe, E.J.: Viruses and oral cancer. *Crit Rev Oral Biol Med* 1991, 2: 153-175.
23. Krogh, P.: The role of yeast in oral cancer by means of endogenous nitrosation. *Acta Odontol Scand* 1990, 48: 85-88.
24. Elwood, J.M., Ballagher, R.P.: Factors influencing early diagnosis of cancer of the oral cavity. *Can Med Assoc J* 1985, 133: 651-656.
25. Nally, F.: Oral cancer- diagnosis and management. *Practitioner* 1992, 236: 812-817.
26. Johnson, B.K., Squier, C.A.: Smokeless tobacco use by youth: A health concern. *Pediatr Dent* 1993, 15: 169-174.
27. Daugherty, V.S., Levy, S.M., Ferguson, K.J., et al.: Surveying smokeless tobacco use, oral lesions and cessation among high school boys. *J Am Dent Assoc* 1994, 125: 173-180.
28. Blot, W.H., McLaughlin, J.K.: Smoking and drinking in relation to oral and pharyngeal cancer. *Cancer* 1988, 48: 3282-3287.
29. Mashberg, A., Boffetta, P., Winkleman, R., Garfinkel, L.: Tobacco smoking, alcohol drinking and cancer of the oral cavity and oropharynx among US veterans. *Cancer* 1993, 72: 1369-1375.
30. Pajak, T.F., Fazekas, J.T., Davis, L.W., Marcial, V.A.: Analysis of radiation therapy oncology group head and neck database: Identification of prognostic factors and reevaluation of Merican Joint committee staging system in head and neck cancer. In: Vogl, S. ed. *Head and Neck Cancer*, New York: Churchill Livingstone, 1988.
31. Mor, V., Laliberte, L., Morriss, J.N., Wienmann, M.: The Karnofsky performance status scale. *Cancer* 1984, 53: 2002.
32. Stell, P.M., McCormick, M.S.: Cancer of the head and neck; are we doing any better? *Lancet* 1985, 2: 1127.
33. Guggenheimer, J., Verbin, R., Johnson, J., et al.: Factors delaying the diagnosis of oral and oro-pharyngeal carcinomas. *Cancer* 1989, 64: 932-935.

34. Eisenbud, L., Sciubba, J.: Oral cancer: A multidisciplinary challenge. *J Hosp Dent Pract* 1978, 12: 96-100.
35. Isreal, H.: Early squamous cell carcinoma of the mouth. Part 1. Clinical evaluation. *Compend Contin Educ Dent* 1987, 563-569.
36. National Cancer Institute Monograph 1981: No. 57. SEER
37. Pindborg, J.J.: Screening for oral cancer. In: Prorock, P.C., Miller, A.B. eds. *Screening for Cancer*, Tech Rep Series 78, Geneva: UICC, 1984.
38. Warnakulasuriya, S., Pindborg, J.J.: Reliability of oral precancer screening by primary health care workers in Sri Lanka. *Comm Dent Health* 1990, 7: 73-79.
39. Brunn, J.P.: Time lapse by diagnosis of oral cancer. *Oral Surg, Oral Med Oral Pathol* 1976, 42: 139-149.
40. Maimon, H.N., Steinfeld, A.D.: Toluidine blue staining for metastatic carcinoma to the oral cavity. *The Ohio State Med J* 1972, 68: 356-357.
41. Kugars, G.E., Mehailesen, W.L.: Toluidine blue: its significance and applications in dentistry. *General Dentistry* 1989, 37: 404-407.
42. Silverman, S.: Early diagnosis of oral cancer. *Cancer* 1988, 62: 1796-1799.
43. Epstein, J.B., Scully, C., Spinelli, J.J.: Toluidine blue and Lugol's iodine application in the assessment of oral malignant disease and lesion at risk of malignancy. *J Oral Pathol Med* 1992, 21: 160-163.
44. Rosenberg, D., Cretin, S.: Use of meta-analysis to evaluate toluidine chloride in oral cancer screening. *Oral Surg Oral Med Oral Pathol* 1989, 67: 621-627.
45. Staffl, A.: ed. Diagnosis and Treatment of Intraepithelial cervical neoplasia. *Conference on Early Cervical Neoplasia*. 1981, pp. 925-940.
46. De Lia, J.: Letter to editor. Papanicolaou testing. *JAMA* 1985, 253: 3250.
47. Mashberg, A.: Final evaluation of toluidine chloride rinse for screening of high-risk patients with asymptomatic squamous carcinoma. *J Am Dent Assoc* 1983, 106: 319-323.

PRACTICE PROFILE

By:
Beverley Contreras, Dip DH

Not a day goes by that I don't look forward to going to work, and I am always anxious to share my experiences with my family at night. What more could a person ask of their profession?

You see, I have two incredibly interesting and diverse positions topped off with excellent supervisors and all the room to grow, learn and achieve. Let me tell you about them.

I am employed by the Pacific Health Care Society (P.H.C.S.), which owns and operates long-term care facilities. My partner, Trish Parr, and I, are the Dental Hygiene Department. Our days revolve around assessing residents upon their admission to the facilities and at least yearly thereafter. We determine their individual oral needs, express them to the carestaff and refer appropriate concerns to the resident dentist. Our assessment input is included with the other disciplines involved in the care of these special people. The assessments are compiled and discussed at their Resident Care Conferences where we learn so very much about the residents and their other daily needs. By being part of the team at these conferences, we are able to promote the integration of oral care into overall health care and, in turn, become more informed about the tremendous responsibilities and contributions all the other disciplines make.

Clinical needs are identified during our assessments and duly noted for future periodontic therapy appointments. We bring the



BEVERLEY CONTRERAS, Dip DH

service to the client and often can be found perched on the side of a resident's bed. (Scaling takes on a whole new dimension with your feet up!) You wouldn't believe how well a fluffy pillow can serve as a head cradle. For these special folks, the bed is the best place to provide treatment.

Mouthcare is evolving in our facilities but, as with all behaviour modifications, it requires patience and persistence. Our greatest lesson has been the old saying "you catch more flies with honey than vinegar". Always reminding ourselves of the tremendous workload caregivers face, we present the importance of mouthcare coupled with a very practical approach.

Twice a year we provide in-service workshops to the three facilities we service, encouraging daily mouthcare and providing practical examples of how it can be achieved. With the open communication between ourselves and the carestaff, we often wonder who comes away more enlightened, our co-workers or us. Our mouthcare protocol is included in all orientation packages so new employees have the information handy from day one. As well, from time to time, P.H.C.S. receives requests for our services in an outreach capacity from smaller facilities. This usually involves assessing all residents, making recommendations to the administration and providing education to the staff to familiarize them with daily mouthcare routines they can then help initiate. We have also been to other cities to provide presentations

at other long term care facilities and to groups of hygienists interested in working in similar environments. P.H.C.S. is always happy to share our expertise. It is committed to bettering the lives of all in long term care and the community at large. It has valued and supported the dental hygiene program since its inception.

Well, that takes care of the first half of my week. The second half is spent working with the Vancouver Health Department on A Culturally-Specific Oral Health Program for High Risk Vietnamese Children. (I'm still in the process of memorizing that title.) However, I **do** know what my role is. The first stage of the project began in January 1994. At that time, a Vietnamese-speaking Community Dental Health Worker and I visited Mount Pleasant Clinic on a weekly basis. Vietnamese families had their wee ones immunized at the clinic and while there, the Health Care Worker would interview the parents to assess their dental knowledge, nutritional awareness and mouthcare habits. My role was to examine the children's mouths and serve as the Community Health Worker's information source who then conveyed oral health information to the parents, in Vietnamese. Similar procedures were carried out for comparison groups.

We are now evaluating the statistics our information-gathering has provided. The data clearly indicates a high rate of decay and a definite link to the bottle. In January 1995, we will be preparing an educational package to introduce to the families at Mount Pleasant. We will focus on alternatives (to the bottle) for comforting, teething and oral care. In addition, we will suggest caregivers encourage drinking with a training cup as soon as it is appropriate. Following a year of providing such information on a one-to-one counseling basis, we will repeat the information-gathering process with both the group at Mount Pleasant and our comparison groups. The aim is to make a difference in oral care awareness. We hypothesize that the awareness we foster will be reflected in a decrease of decay in the younger siblings, as compared to their older sibling, whom we initially examined at Mount Pleasant. If our efforts prove effective, the educational package will be used to educate all cultural groups in an effort to improve oral health.

And, speaking of multiculturalism, we have just completed filming an oral care video with just that in mind. I had the pleasure of writing

the first draft script for the video. From there, our working group, myself included, revised it a total of eight times before it was ready for filming. What a great sense of accomplishment I have as I look at how it has all come together. It is an experience that has made me realize the value of common goals and team work.

And, if that hasn't kept me busy enough, I've also been doing a 'maternity leave' with the Vancouver Health Department. This has placed me at chairside working with expectant Mom's at risk for giving birth to low birth-weight babies. They are referred to us via a city nutritionist. Our role is to provide as much education as possible in two appointments regarding the importance of good oral health care for themselves and their children and as much oral hygiene treatment as possible. We hope that this will improve their oral health and, in turn, their nutritional intake. In this position I also work with seniors by providing in-services at long term care facilities and presentations at senior's groups throughout the city.

So you can see, as much as I'd like to, there just isn't time to get into trouble anymore. I am always busy, always on the move, always challenged, always learning, and above all, always loving my job(s).

Beverley Contreras is a Registered Dental Hygienist licensed to practise in Manitoba and British Columbia. She graduated from the University of Manitoba in 1979, worked in private practice and was an instructor with the Red River Community College's Dental Assisting Program and the University of Manitoba's Dental Hygiene Program. In 1982 she married Carlos in Mexico City and spent a year there in private practice during which time she became fluent in Spanish. In 1989 she and her family relocated to Lahr, Germany where she spent three years working in a Canadian Forces Dental Clinic. Upon returning to Canada she and her family settled in Port Coquitlam, BC where she is presently employed with the Pacific Health Care Society and the City of Vancouver Health Department. Her son Johann is ten years old. Her interests include cycling, travel, collecting teapots, good food and laughter.

RESOURCE CENTRE — NEW ACQUISITIONS

Book References

"Second Opinion": What's wrong with Canada's health care system and How to fix it
Michael Rachlis, M.D. and Carol Kushner
Published by Harper Collins Ltd., 1989.
(One available)
ISBN# 0-00-215678-4

"Strong Medicine": How to save Canada's health care system
Michael Rachlis, M.D. and Carol Kushner
Published by Harper Collins Ltd., 1994.
(One available)
ISBN# 0-00-255281-7

IFDH 13th International Symposium Call for Abstracts

The 13th International Symposium on Dental Hygiene will be held in Tokyo, Japan November 23-25, 1995.

Anyone interested in contributing a paper for a Workshop or Free Communication presentation must complete an Abstract Form and forward two copies of the form along with their conference Registration Form to the IFDH Conference Secretariat.

Free Communications will be presented as Oral Presentations, Poster Presentations or Table Clinics. You may identify which format you prefer on the Abstract Form. Workshops are allotted 15 minutes while the presentation time for oral presentations has been set at 30 minutes (including a question and answer period). Poster Presentations should be within 0.9 m high and 2.0 m wide. Table Clinics will have a 30-minute time allotment.

Screening and allocation of all submissions is the responsibility of the Scientific Program Committee. Each contributor is to receive the results of screening by July 31, 1995.

Call Janice Edgar at CDHA (613) 224-5515 if you wish to have a copy of the Abstract Form faxed or mailed to you.

Deadline for submissions is **May 31, 1995.**



Canadian Dental Hygienists Association

HALIFAX

Sixth Annual Professional Conference

For more information call 1-800-267-5235

CAPITALIZE ON AN EXCELLENT CONTINUING EDUCATION OPPORTUNITY

The Canadian Dental Hygienists Association's Annual Professional Conference provides an ideal opportunity to earn CE Credits while exchanging information and ideas about the dental hygiene profession with colleagues from across Canada.

It also provides CDHA members with a unique opportunity to see their organization 'in action' since the Association's Annual General Meeting is held the day prior to the opening of the Annual Conference.

Delegates also have an excellent opportunity to meet with representatives of the dental industry to learn more about the newest products and technologies moving the profession into the 21st century. This year the Commercial Table Display will be held on Saturday and we anticipate the participation of more than twenty companies.

Register today !

UNIGLOBE PREMIER TRAVEL PLANNERS INC. (Slater St. - Ottawa)
is the Canadian Dental Hygienists Association's official travel agent.
Call Kathi at 1-800-267-9372 to make your Halifax travel arrangements.

In previous issues of PROBE we have highlighted the scientific sessions that will be delivered at this event. The final session to be highlighted is the Panel on Self-Regulation. We are confident our members in Atlantic Canada will appreciate the information this session will bring to them and are pleased to confirm that this is one of three sessions to be simultaneously translated on Saturday, June 24.

PANEL DISCUSSION ON SELF-REGULATION

About the Moderator:

Lynda McKeown Mickelson is President of the College of Dental Hygienists of Ontario. She served as Chair of CDHO's Transitional Council and is intimately aware of the challenges self-regulation presents to the Dental Hygiene profession. She is a resident of Thunder Bay, Ontario and has worked in private practice for more than 26 years. She also taught Dental Hygiene at Confederation College in Thunder Bay from 1976-1987.



From Tooth Cleaner to Health Professional: What Dental Hygiene Needs to Accomplish, and When, in its Evolution Towards Professionalism

Bob Konopasky, PhD, C. Psych.
Halifax, Nova Scotia



Having identified prevention as a primary goal, dental hygiene, wittingly or unwittingly embarked on an ascent from technical to professional work. With this natural evolution, there are, necessarily, growing pains. From fear and dissension within the ranks, to control and intimidation from outside sources, dental hygiene has now established a record of changes from technical work to professional work. The remaining phases of "professionalizing" dental hygiene can be identified. While such change and evolution always occur unevenly, the trend is clear and predictable. A time line can be established for this "professionalization", and this time line has clear implications for timely changes in academic programs.

Benefits of Self-Regulation of Health Care Professions from the Perspectives of the Public, the Government, the Practitioner and the Profession

Marilyn MacKay-Lyons, MSc(PT), BSc(PT), Dip(PT)
Halifax, Nova Scotia



This presentation will include a brief overview of what criteria are considered by some to be necessary to have the designation of profession and, more specifically, a health care profession. One of these criteria, self-regulation, will then be addressed in terms of what it means to be self-regulatory, i.e. the responsi-

bilities of the professional licensing body, the expectations of government that are associated with this designation, and the needs of the public. This will be presented in the context of the health professions, with specific reference to dental hygiene. The benefits of self-regulation will be considered from the perspectives of the public, the government, the dental hygienist, and the profession of dental hygiene.

Self Regulation: The Public, The Practitioner, The Profession

Patricia Grant, Dip DH, BA
Halifax, Nova Scotia



Ms. Grant will discuss self-regulation as it relates to the conference theme: The Public, The Practitioner, The Profession. The first priority of legislation is that it be in the best interest of the public. The relationship between self-regulation, the public and the profession's interests will be explored. Her presentation will touch upon self-regulation as a step on the continuum toward professionalization and the barriers presented by the profession and practitioners themselves. Increasing the awareness of a profession regarding the legal, ethical and moral issues which surround self-regulation of a profession can often assist in overcoming these barriers.

Beyond Self-Regulation

Brenda Walker, Dip DH
Edmonton, Alberta



As Executive Director/Registrar of the Alberta Dental Hygienists Association Brenda has experienced, first-hand, the struggle for self-regulation. In 1990, Dental Hygienists in Alberta became self-regulated and they are now working to further remove barriers to oral hygiene access. The Alberta government is currently reviewing its health care structure and Brenda has ensured that ADHA plays a proactive role in this process by ensuring it has a voice at the meetings being held throughout the province. Under the leadership of Ms. Walker, ADHA is making every effort to show the government how removing barriers to dental hygiene care will improve quality of care and reduce health care costs. She will share her experiences in this regard with delegates.

CDHA 6th Annual Professional Conference

Halifax, Nova Scotia

June 23-25, 1995

Delegate Registration Form

CDHA Member / ADHA Member

* Full Registration: on or before May 1, 1995 \$215.00 (GST incl.)
after May 1, 1995 \$265.00 (GST incl.)

**Full registration includes access to Friday reception, scientific sessions, exhibits, breaks, luncheons and Saturday evening social.*

** Daily Registration: on or before May 1, 1995 \$100.00 (GST incl.) Please indicate day(s)
after May 1, 1995 \$130.00 (GST incl.) ____ Fri. ____ Sat. ____ Sun.

***Daily registration fees include the following: Friday: scientific, break, evening reception.
Saturday: scientific, lunch, exhibits (does not include Sat. evening social). Sunday: breakfast, scientific, Awards Luncheon.*

Please contact your provincial licensing body for applicable continuing education points.

Other Health Professionals/Public

Full Registration: * \$400.00 (GST incl.)
* \$265.00 if you are a member of your National Professional Association
Daily Registration: * \$150.00 (GST incl.)

Students (Full-Time Dental Hygiene Only)

Full Registration: Free for lectures only (does not include socials or meals)
\$100.00 (GST incl.) includes luncheons, breaks and reception (not Saturday social)
Daily Registration: Free for lectures only
\$40.00 (GST incl.) includes lunches and breaks (not Saturday social or Friday Reception)

Social Tickets – Pier 22: \$35.00 extra for all registrations where social is not included.

Early-bird draw

Registrations received prior to May 1, 1995
are eligible to win free registration.

Cancellation Policy

If cancellation notice is received in writing prior to
May 1, 1995, a refund, less \$25.00 administration fee, will be
issued. After May 1, 1995, a 50% refund will be issued.
No refunds after June 1, 1995.

Complete and send form to: CDHA Conference, 96 CentrepoinTE Dr., Nepean, ON, K2G 6B1

Cheque ☐ (made payable to CDHA) Amount _____
or Visa Number _____ Expiry date _____ Amount _____
(*Mastercard/Amex are not accepted*)
Name _____ CDHA ID# _____
Address _____
City _____ Prov. _____ Postal Code _____
Telephone: Res () _____ Bus () _____

Please indicate the following:

Extra tickets for Pier 22 Social, Saturday, June 24th @ \$35.00 ea. *Note ticket to this social is included with full registration.
(please include payment with registration fee). _____

Vegetarian Yes ☐ No ☐ Please indicate any food allergies: _____

Hotel Information: CDHA has reserved a room block at the Sheraton Halifax for conference participants. However,
hotel accommodation arrangements are the responsibility of the registrant. Call: Sheraton Halifax,
1919 Upper Water Street, Halifax, NS Tel: (902) 421-1700, Fax: (902) 422-5805
Rate: \$117.00 plus taxes (Single or Double occupancy).

Cut-off for reservations at conference rate is May 13, 1995.

Calendar

		SPONSOR	LOCATION	FOR INFO CALL
April				
1	University of Alberta — Faculty of Dentistry Research Day (Oral & Poster Presentation)	University of Alberta	Edmonton, AB	(403) 492-5849
1	AIDS and Your Dental Patient — Dr. Susan Sutherland — Dr. Allan Harris	Hamilton Dental Hygienists Component Society/ODHA	Hamilton, ON (Venture Inn)	(800) 315-6342
1&2	Local Anaesthesia for Dental Hygienists	University of British Columbia	Vancouver, BC	(604) 822-2627
4	Oral Radiology	Oregon State University	Portland, OR	(503) 494-8857
5	A Broker's Presentation of Disability Insurance Choices — Nancy McKenzie	Southern Alberta Dental Hygienists Society	Calgary, AB	(403) 284-0060
8	Making A Difference, — Nancy Majeski	Nipissing Dental Hygienists Component Society/ODHA	North Bay, ON	(800) 315-6342
8	Moving Ahead the Year 2000, — Anita Jupp	Dalhousie University	Halifax, NS	(902) 494-1674
8	Infection Control, — Mr. David Marks — Dr. Lenny Arenson	Ottawa Dental Hygienists Component Society/ODHA	Ottawa, ON	(800) 315-6342
20	EDDS Spring Meeting: Table Clinics and Poster Presentations	Edmonton District Dental Society	Edmonton, AB	Robyn at (403) 468-7270
21&22	Local Anaesthesia for Dental Hygienists	University of British Columbia	Vancouver, BC	(604) 822-2627
21	Update for Dental Hygiene	University of Washington	Seattle, WA	(206) 543-5448
22	Hot Topics in Restorative Dentistry, — Richard Price, BDS, DDS, MS, MRCD(C), FDS, RCS(Edin)	Dalhousie University	Halifax, NS	(902) 494-1674
28	CDDS Table Clinics/ADA Visitations	Calgary District Dental Society	Calgary, AB	Jill at (403) 239-1465
29	Instrument Review for Dental Hygienists — Barb Long, SDT, RDH	Saskatchewan Dental Hygienists Association	Regina, SK (SIAST)	(306) 775-1390
May				
2	Medical Emergencies, — Dr. Trey Petty	Southern Alberta Dental Hygienists Society	Calgary (Foothills Hospital)	Barbara (403) 284-0060
5-7	Saskatchewan Dental Therapists Convention	Saskatchewan Dental Therapists Association	Saskatoon, SK	(306) 763-2797
6	Oral Pathology II	Oregon State University	Portland, OR	(503) 494-8857
12	Expanded Functions	Oregon State University	Portland, OR	(503) 494-8857
12	Local Anaesthetic Review	Oregon State University	Portland, OR	(503) 494-8857
13	Importance of Medical History to the Dental Appointment — Dr. W. Raborn; Infectious Disease — Dr. B. Romanowski	Northern Alberta Dental Hygienists Society	Edmonton, AB	Rae (403) 481-7975
June				
3-9	Orthodontic Module for Dental Hygienists	University of British Columbia	Vancouver, BC	(604) 822-2627
9	Soft Tissue and Bone Pathology for Dental Hygienists	University of Washington	Washington	(206) 543-5448
23-25	CDHA 6th Annual Professional Conference: <i>The Public, The Practitioner, The Profession</i>	CDHA	Halifax, NS (Sheraton Halifax)	1-800-267-5235

George Brown College will be conducting a two week Dental Hygiene Refresher Course, July 3 to 14, 1995. For information, please contact Petula Widyaratne at (416) 944-4543

Algonquin College will be conducting a 36-hour Dental Hygiene Clinical Registration Examination Preparation Course, July 23-27. For information, please contact: Cathy Thom at (613) 727-4723, ext 7054.

Article: Oral Leukoplakia and Erythroplakia:

A Review and Update

Author: Jerry Bouquot, DDS, MSD

Journal: Practical Periodontics and Aesthetic Dentistry

Vol. 6, No. 6

Because the early identification and diagnosis of precancerous lesions is imperative for successful treatment and outcome, the clinician must maintain currency and continually upgrade knowledge in this area.

This article reviews the current understanding of erythroplakia, leukoplakia, and smokeless tobacco and their significance to oral cancer.

Currently the World Health Organization (WHO) defines a precancerous lesion as a "benign, morphologically altered tissue which has a greater than normal risk of containing a microscopic focus of cancer at diagnosis, or of transforming into a malignancy after diagnosis". Precancerous conditions include any client habit which, while not necessarily altering the outward clinical tissue appearance, increases the risk of cancer development.

Leukoplakia is a chronic white macule that cannot be wiped off, cannot be given a precise diagnostic name, and doesn't disappear with the elimination of the known etiologic factors. It is the most common chronic oral lesion in white adults and affects 3% of this population. It presents in 80% of all precancers of the head and neck, and is seen more frequently in older males. Traditionally, the lesion is 1.4 cm in diameter and the client has been aware of it for at least two years prior to consultation.

The average rate of malignant transformation is approximately 4-6%. The location of the lesion is significant; lesions of the ventral surface of the tongue or floor of the mouth bear careful examination as 40% of their biopsies confirmed precancerous or cancerous changes. The author stresses that a "diagnosis of exclusion" requires that the clinician be well-versed in the individual characteristics of white lesions, allowing the elimination of all but the true leukoplakia.

Typical causes of the condition include tobacco, ultraviolet radiation and microorganisms. Over 80% of leukoplakia clients are smokers. For those who quit, 60% can expect the lesion to disappear. Ultraviolet radiation, through sun exposure (farmer's lip), for example, is strongly associated with leukoplakia at the vermilion border of the lip. Research indicates that as many as 66% of some rural communities present with vermilion lip carcinoma associated with leukoplakia.

Smokeless tobacco keratosis is a chronic grey or white transparent lesion seen on the mucosa where the smokeless tobacco contacts the tissue. The potential for malignancy change, in these lesions, is .4%. This lesion vanishes with the cessation of tobacco use. If it remains following cessation of tobacco use, it is considered a true leukoplakia.

Hairy Leukoplakia, while not a true leukoplakia, is a white hyperkeratosis on the lateral tongue mucosa. It is more appropriately termed oral HIV keratosis to prevent confusion with leukoplakia.

Organisms associated with leukoplakia include *Candida* (fungus) and the Human Papilloma Virus (HPV).

No longer considered an etiologic factor is mechanical irritation. Frictional keratosis is not associated with malignant metamorphosis.

Erythroplakia is a red, chronic macule that is unrelated to trauma, vascular, or inflammatory reasons. The etiology is virtually the same as leukoplakia. Two-thirds of all clients presenting with erythroplakia are male, greater than 94% smoke, and the average age of the client is 57 years. Alcohol abuse is present in greater than 65% of the affected population. Although leukoplakias are diagnosed 77 times more frequently than erythroplakias, these red lesions translate to cancer in greater than 33% of the cases. Red lesions remaining after two weeks, once etiologic factors have been resolved, should be considered erythroplakia.

Because few leukoplakias actually evolve into cancerous conditions, complete surgical excision is not always recommended. Following a confirming biopsy, continued and thorough follow-up may be a better protocol. The levels of dysplasia determine the frequency of re-examination.

Due to the increased risk of erythroplakia becoming cancerous, any lesion of this type with confirmed dysplasia, requires complete removal followed by long-term re-evaluation.

Article: Chlorhexidine Use After Two Decades of Over-the-Counter Use

Authors: Jasim M. Albandar, Per Gjermo, and Hans R. Preus

Journal: J Periodontology, Feb 1994

Chlorhexidine (CHX) is a broad spectrum, plaque-inhibiting antibacterial compound, available by prescription for use in the medical and dental professions. It has only recently been available to the U.S. dental profession, and therefore little data are available on habits of professional use. It has been available in Norway, without prescription, for over twenty years. This paper investigates characteristic use by Norwegian dentists in practice.

A written questionnaire was sent to 10% (randomly selected) of the registered dentists in Norway soliciting their opinions on the usefulness, indications, side effects and formulations of CHX. A telephone interview was conducted with 2% of the same population.

Of the 78% who responded, 14% admitted that they never used CHX. Eighty-five percent indicated that they used it post-surgically, 74% when treating acute gingival conditions and 35% during non-surgical periodontal therapy.

In the practice of oral surgery, 57% utilized CHX with all clients, 73% for the treatment of stomatitis and 54% for treating herpes simplex lesions.

The most useful applications for CHX, as indicated by the dentists, were short-term plaque control (i.e. post-surgical management), long-term plaque control and the treatment of fungal and herpes simplex infections.

This study group reported that side effects included: tongue, teeth and restoration staining (77%), bitter taste, dry mouth, and mucosal ulcerations (18% combined).

The favoured formulation of CHX used by these dentists was as a mouthwash (94%) versus a gel (6%). Ninety-six percent recommended the .2% solution of CHX, as opposed to diluting it to .1%. Eighty-eight percent of the study group recommended using the CHX mouthrinse 2-3 times daily.

Dental literature indicates that CHX can control gingival hyperplasia associated with organ transplant and immunosuppressive drug use. CHX may also be indicated for controlling periodontal complications in clients experiencing chemotherapy. Other conditions which CHX may assist include clients suffering from agranulocytosis, handicapped individuals, controlling the risk of endocarditis in clients that

are susceptible, and preventing opportunistic infections (including candida) in clients who are experiencing a compromised immune system.

Further, CHX use has been recommended by some for the treatment of ANUG, recurrent aphthous ulcers in children, and for use preoperatively to prevent the development of dry socket.

It is believed that CHX achieves its effectiveness because of its substantivity. Dose elevation, and increasing the exposure frequency, may increase the anti-plaque effect however, side-effects appear to be dose-related.

BOOK REVIEW

Oral Pathology for the Dental Hygienist

Olga A.C. Ibsen, RDH, MS, and;

Joan Anderson Phelan, DDS;

W.B. Saunders Company,

Harcourt Brace Jovanovich, Inc.

The Curtis Center

Independence Square West

Philadelphia PA 19106

380 Illustrations, indexed, 490 pages

Reviewed by: MWO Claude Bujold RDH

Senior Dental Hygiene Instructor

Canadian Forces Dental Services School

Borden, ON L0M 1C0

This textbook embraces the essentials of oral pathology knowledge required by the Dental Hygienist — student or practitioner. A glance through the text's "list of contributors" confirms that the authors, who are themselves well-qualified, have ensured that the contents are more than adequately supported by the necessary expertise.

The book is divided into seven chapters. Each chapter covers a specific disease classification with the main classifications further subdivided within each chapter. Each chapter is well-referenced and the references are current.

Chapter one introduces the reader to the diagnosis process. Various terms used in the diagnosis process and the different types of diagnosis are discussed. Benign conditions, which are considered variants of normal, are included in this chapter.

Chapter two deals with inflammation and repair. Both processes are well explained. Physical and chemical injuries of oral tissues are the main menu items in this chapter.

Chapter three, entitled Immunity, covers the various diseases that trigger immunologi-

cal responses. Bacterial, viral and fungal infections as well as autoimmune diseases are thoroughly discussed.

Chapter four focuses on developmental disorders of the oral cavity.

Chapter five looks at neoplasia with an emphasis placed on tumors seen in the oral cavity.

Chapter six deals with genetics. Inherited disorders with oral manifestations are the focus of this chapter.

Finally, chapter seven covers systemic diseases and their oral manifestations. The greater part of this chapter is dedicated to the oral manifestations of HIV and AIDS.

The chapter formatting is consistent throughout the volume. Each chapter clearly defines its objectives at the onset. This is followed by a presentation of 'descriptive vocabulary', a listing that defines key words pertinent to the subject matter. (A glossary at the end of the book complements the descriptive vocabulary contained in each chapter.)

The body of each chapter begins with a detailed explanation of the basic pathological concepts related to the disease classification. This approach is valuable because it helps the reader to gain a better understanding of the *origins* of the specific disease entities. For example, in the chapter on genetics, the authors explain the relationship of chromosomes, cell divisions, RNA and DNA before discussing specific genetic abnormalities. Diseases are then discussed in detail. Information regarding etiology, clinical and radiological appearances, location and diag-

nosis are included for all diseases identified. Furthermore, a short paragraph on treatment and prognosis is included, when warranted.

The explanations are well supported by black and white photographs throughout the text. In addition, fifty high-quality colour plates are presented at the beginning of the book. The colour plates focus on clinical manifestations frequently encountered by dental hygienists. A slide set of these illustrations is also available to instructors for classroom presentations.

At the end of each chapter, a series of well-formulated questions challenge the reader. The review questions provide an excellent tool with which to measure one's understanding of the subject matter discussed. Having the answers provided at the end of the text ensures one can perform a *self-assessment* to determine whether the level of comprehension achieved is satisfactory.

The material in this volume is presented in a fashion which facilitates learning. The large print and well highlighted topics make for easy reading. The organization of the chapters encourages the reader to learn in a systematic manner. The explanations provided focus on important aspects of diseases as they pertain to Dental Hygiene and despite their thoroughness, they are simple enough so as not to confuse the student reader.

An excellent addition to any library both as a school textbook or reference manual.



Oral Microbiology

- _____ is the most common isolated microbial species in human actinomycosis.
 - Wolinella recta
 - Eikenella carrodens
 - Actinomyces viscosus
 - Actinomyces naeslundii
 - Actinomyces israelii
- Lactobacillus* grow best in a media with a
 - pH of 1.1
 - pH of 5.4
 - pH of 7
 - pH of 8
 - neutral pH
- In bacterial plaque associated with gingivitis there is an increase in thickness and the mass of plaque with an increase of
 - micrococci
 - spirochetes
 - gram negative cocci
 - gram positive cocci
 - gram positive non-motile rods
 - gram negative motile rods
 - 1 and 2
 - 1 and 4
 - 2 and 5
 - 3 and 5
 - 2 and 6
- Porphyromonas gingivalis* has been associated with
 - adult periodontitis
 - refractory periodontitis
 - active periodontal lesions
 - rapidly progressive periodontitis
 - all of the above
- Most likely, young children acquire their oral microflora by frequent transfer of bacteria between family members.
 - true
 - false
- The human periodontal pocket is a habitat for a complex microflora of at least _____ different bacterial types.
 - 10
 - 30
 - 50
 - 100
 - 300
- Which of the following is not involved in the attachment of or adherence of plaque to the tooth surface?
 - hydrogen bonding
 - van der Waal's forces
 - absorption of glycoproteins
 - aggregation and agglutination
 - ionic and hydrophobic interactions
- Plaque accumulation at the gingival margin and gingival crevice
 - changes to include spirochetes when dental caries occur
 - is affected by the presence of increase sucrose
 - is unaffected by the implementation of antibiotic therapy
 - alters to include cocci after 5 to 6 days
 - is predominated by small rods and filamentous forms within 24 hours
- Environmental conditions which affect the colonization of oral bacteria are
 - pH of the area
 - oxygen potential
 - age of the patient
 - nutrient availability
 - presence of soft tissue lesions
 - 1, 2 and 3
 - 1, 2 and 4
 - 1, 3 and 5
 - 1, 4 and 5
 - 2, 4 and 5
- Actinobacillus actinomycetemcometans* are extremely virulent micro-organisms that will
 - mediate bone resorption
 - release a powerful leukotoxin
 - depress fibroblast proliferation
 - affect polymorphonuclear function
 - all of the above
- Streptococcus mutans* are particularly cariogenic because they
 - are anaerobic
 - produce dextrans
 - are transmissible
 - are slightly aciduric
 - produce intracellular polysaccharides
- The first stage in plaque morphogenesis is acquired pellicle formation.
 - true
 - false
- Micro-organisms attached to the outer layer of calculus perpetuate the inflammatory process because they release
 - acids
 - exotoxins
 - endotoxins
 - enterotoxins
 - extra-cellular polysaccharides

- Your patient, a 24-year-old graduate student comes in for a recall appointment. He tells you that for the last month he has experienced a sore throat, fevers and has been extremely fatigued. Clinically you note that he exhibits erythematous anterior and posterior tonsillar pillars, enlarged submandibular and cervical lymph nodes, swollen eyes, and petechia at the junction of the hard and soft palate)
 - Coxsackievirus
 - Rubeola virus
 - Candida albicans
 - Hepatitis B virus
 - Epstein-Barr virus

What micro-organism might be responsible for his condition?

Answers:

- | | | |
|--------|--------|-------|
| 13. c) | 14. e) | 1. e) |
| 10. e) | 11. b) | 2. b) |
| 7. d) | 8. b) | 3. e) |
| 4. e) | 5. a) | |
| 6. e) | 9. b) | |
| 3. e) | 12. a) | |

References

- Ali, R., Skaug, N. Nilsen, R. and Bakken, V. Microbial Associations of 4 putative periodontal pathogens in Sudanese adult periodontitis patients determined by DNA probe analysis. *J. Periodontol.* 65(11): 1053-1057, 1994
- Könönen, E., Saarela, M., Karjaleman, J., Jousimies-Somer, H., Alaluusua, S., and Asikainen, S. Transmission of oral prevotella melaninogenica between a mother and her young child. *Oral Microbiology and Immunology* 9: 310-314, 1994.
- Newman, M., and Nisengard, R. *Oral Microbiology and Immunology*. W.B. Saunders Co., Toronto, 1988: 251-255, 411-435.
- Shapira, L., Takashiba, S., Amar, S., and Van Dyke, T. *Porphyromonas gingivalis* lipopolysaccharide stimulation of human monocytes: dependence on serum and CD14 receptor. *Oral Microbiology and Immunology* 9: 112-117, 1994.
- Willet, N., White R., and Rosen S. *Essential Dental Microbiology*. Appleton and Lange, Connecticut, 1991: 273, 319-339.
- Slots J., and Taubman, M. *Contemporary Oral Microbiology and Immunology*. Mosby, Toronto, 1992: 283-371.

Thanks to Marg Pyett, Professor of Dental Hygiene at St. Clair College in Windsor, Ontario for submitting this issue's self-assessment test.

Behind Every Great Smile...

The Campaign Continues

Dental hygienists across the country actively participated in CDHA's National Dental Hygiene Campaign held October 16-23, 1994. Reports indicate that many members found that the target group, teens, was an important group to address albeit, a challenging one to effectively communicate with and access. Consequently, some unique and innovative activities and sites were selected to help bring oral health information to teens.

Mall displays were one of the more popular venues used to attract the interest of youths during the 1994 National Dental Hygiene Campaign. In addition to offering information about oral health care, some of this year's mall displays also offered savings coupons for oral health care products and hosted 'toothbrush trade-ins'.

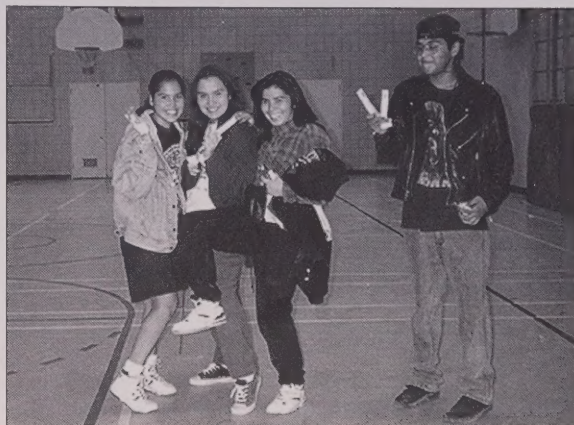
Other activities coordinated to help highlight NDHC this year included guessing games, toothbrush exchanges, balloon bouquets, visits to girl guide meetings, schools, youth centres, YMCA's and pharmacies.

British Columbia's NDHC Coordinator, Karen Gallagher, said in BC there was a higher degree of "creativity" in group activities compared to previous years. For example, Prince George dental hygienists Margit Strobl, Cindy Gibson, Barb Smith and Patricia Noble delivered small bouquets of carnations, toothbrushes and floss to teenage mothers supported by the Elizabeth Fry Society. They also visited teens at the Native Friendship Centre during 'Gym Night' to deliver toothbrushes, floss and granola bars.



Dental Hygienists Cindy Gibson (left) and Margit Strobl (right) with members of the Reconnect Program at the Native Friendship Center in Prince George.

An article appearing in *Prince George This Week* during the campaign, reported on how the profession has changed over the past 25 years. College of New Caledonia dental hygiene instructor, Patricia Noble, discussed the trend towards prevention as she explained how the focus is no longer on treating cavities, but rather, preventing them from ever appearing.



Teens associated with the Reconnect Program in Prince George waving the toothbrushes, floss and sugarless gum provided by dental hygienists during NDHC '94.

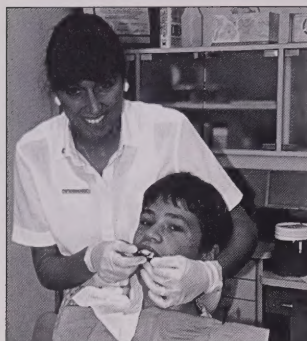
In the Upper Fraser Valley, CDHA President, Maxine Borowko and dental hygienist, Joyce Walker, discussed oral care and the National Dental Hygiene Campaign on "Focus on Health", a television program produced in BC and hosted by Registered Nurse Elaine Gray. The program featuring Maxine and Joyce was aired twice during the campaign.



(l-r) Dental Hygienist Joyce Walker and CDHA President Maxine Borowko on the 'set' for Focus on Health with host Elaine Gray in Abbotsford, BC.

Meanwhile, dental hygiene students enrolled in UBC's degree program viewed the campaign as an opportunity to highlight the numerous career opportunities available in the dental hygiene profession by displaying posters and fact sheets at the university.

Although the 1994 campaign's focus was on teens — activities were not limited to this audience. In Surrey, British Columbia preschoolers listened to a presentation on oral care that inspired interest and curiosity, reports BC's NDHC Coordinator, Karen Gallagher. While, in Fernie, BC CDHA member, Janice Krawchuk, promoted oral care to more than 250 seniors who participated in a 'Flu Fair'. Youth in Qualicum, BC participated in a mouthguard clinic coordinated by dental hygienist, Jody Shworan.



Dental hygienist Yvonne Smith taking an impression to construct a mouthguard for a young client in Parksville, BC.

In Alberta, mall displays were set up in Edmonton and Calgary and some unique communication vehicles were used to highlight the week: in Calgary, a store flyer announced the campaign while in Edmonton the campaign's message was displayed on a bus stop sign! The Southern Alberta Dental Hygienists Society used the opportunity to host a continuing education day for its members while ADHA Executive Director, Brenda Walker and Member Services Coordinator, Josephine Juchli participated in a Dental Hygiene Forum in Peace River that attracted positive media coverage.

The Saskatchewan Dental Hygienists Association placed advertisements in local newspapers and mall displays were set-up in Lanigan, Wynard and Watrous. In Lanigan and Watrous, mall displays attracted participation by offering a toothbrush trade-in service and providing floss and toothpaste samples. In Wynard, about 300 individuals participated in a mall display which also hosted a toothbrush trade-in and, in addition, provided a fish pond inviting children to guess how many pieces of sugarless gum were in the pond — this helped to attract the interest of youngsters.

In Manitoba, dental hygiene students at the University of Manitoba's School of Dental Hygiene used the campaign as an opportunity to visit Daniel McIntyre High School and help a student population of more than 1200 ethnically-diverse individuals understand more about the importance of oral health care. (For a more detailed report of their activities refer to *PROBE* Vol 28 No 6 — Student Scene.)

In Ontario, pencils highlighting NDHC were distributed at some mall displays while others provided oral health information, toothbrush and floss samples and oral health care savings coupons. The December issue of *Contact* (the newsletter of the Ontario Dental Hygienists Association), highlighted numerous NDHC activities undertaken by Ontario component societies. Activities included nutrition displays, library and school presentations, billboard advertising, poster displays in dental offices, and the broadcasting of public service announcements on radio stations and local cable television channels. In London, dental hygienists provided 'toothbrush kits' to local needy groups including Street Connection for Kids. While in Toronto, dental hygienist Marisa Pellegrini appeared as a guest on City Television's "Breakfast-TV" on October 17 & 18.

In the Niagara region, local hygienists visited 21 area high schools to display a dental hygiene related comic strip designed by dental hygienist, Marilyn Sarki of Welland, Ontario.

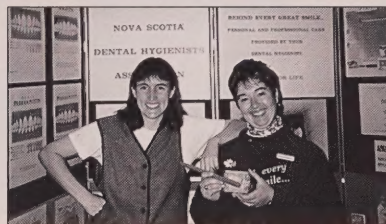
Prince Edward Island's NDHC Coordinator Julie Muise says mall displays set-up in the province attempted to educate the public about the role of dental hygienists. In addition, information highlighting the role of dental hygienists was forwarded to pharmacies, the YMCA and high schools for distribution.

New Brunswick Campaign Coordinator, Joanne Scanlan says mall displays, newspaper articles, radio spots and visits to youth were some of the activities that took place in her province to help highlight the NDHC. She reports that in St. John, information packages on Careers in Dental Hygiene were given to high school guidance counselors and Dental Hygienists volunteered to have their name appear on the package as a contact.



(l-r) Sgr. M. Bishop, Sgr. K. Nemes, WO J. Wood and MWO J Parker providing oral health care information at CFB Esquimalt during the 1994 NDHC.

Judy Parker from Dental Detachment CFB Esquimalt, reported numerous activities on the base. Table clinics on "The Effects of Smoking on the Oral Environment" and "Daily Oral Care Requirements" provided oral care information to base residents and the latter included a demonstration on proper oral hygiene and flossing methods. Another table clinic focused on "Diet and Nutrition" and pocket-sized information about Canada's Food Guide were distributed. MWO Parker staffed a display that discussed fluorides (Victoria is a non-fluoridated area). Judy reports that at the entrance to the base, a canex board announced the National Dental Hygiene Campaign followed by the slogan "Don't Rush Your Brush".



Nova Scotia dental hygiene campaign coordinator Francine Pellerin (left) and Corinna Recker (right) participated in a mall display in Halifax to help the public understand more about oral health and the role of dental hygienists.

CDHA extends its thanks to the Provincial Campaign Coordinators for forwarding the above information to Dawn Mueller, CDHA's National NDHC Coordinator and to Dawn for compiling the details for publication.

INTRODUCING THE 1995 NDHC TARGET GROUP



CDHA's National Dental Hygiene Campaign will continue to promote public awareness of the Dental Hygiene profession in 1995. The 1995 focus will be on infants and the campaign dates are October 15-22, 1995. Read PROBE to learn more about Health Promotion Council's efforts with regard to this annual event.

STUDENT SCENE

Dental Hygiene Students Elaborate on Scope of DH Practice to Health Professionals

In November 1994, dental hygiene students studying at Vancouver Community College targeted more than 150 health care workers in an effort to increase their knowledge regarding the scope of Dental Hygiene practice in Canada today.

Students developed and presented table clinics on

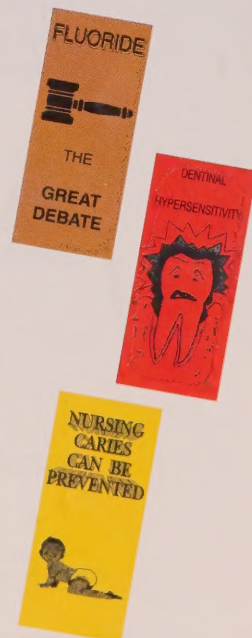
the following topics: Fluoridated Sealants, Bulimia Nervosa, Mouth Protectors, Nursing Caries, Fluoride — The Great Debate, Dentin Hypersensitivity Care, Orthodontic and Periodontic Issues, Electric vs Manual Toothbrushes, Praise or Punish — Client Involvement, A Universal Concern and Aesthetic Restorations.

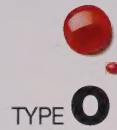


Anna Popok with her table Clinic on aesthetic restorations.



Darren Kluthe and Janina McPhee with their Table Clinic presentation entitled "Praise or Punish" which discussed client involvement and suggested ways health professionals can increase client involvement.





A guide to the types of patients



TYPE

B



TYPE

AB

who need Peridex:

Gingival bleeders

Despite your best efforts, many of your patients continue to display bleeding gums on recall.

And that calls for strong medicine...

PERIDEX® (chlorhexidine gluconate 0.12%) the only prescription oral rinse indicated for gingival bleeding.

When used adjunctively with brushing and flossing, PERIDEX helps promote healing, as demonstrated by its ability to significantly reduce bleeding sites and inflammation due to gingivitis.¹ No serious systemic reactions have been associated with PERIDEX. The most common side effects are an increase in staining of oral surfaces, an increase in supragingival calculus and a slight and temporary alteration in taste perception.

Gums that bleed heal better with

PERIDEX®
(CHLORHEXIDINE GLUCONATE 0.12%)

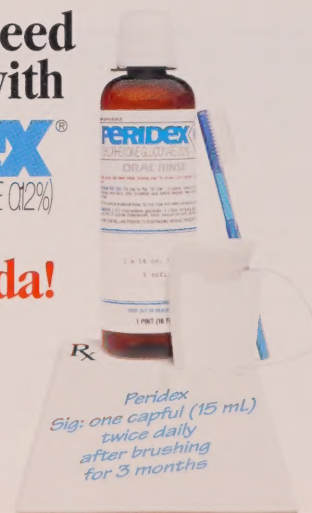
New in Canada!

For ordering information
call 1-800-363-2876

Procter & Gamble Inc.

Please see full prescribing information.

PAAB



Guided Bone Regeneration

By: *Leanne D. Carlson-Mann, Dip DT, Dip DH*

History

A 45-year old white male with a high lip line presents with a vertical root fracture of tooth #22. Radiographic examination of the

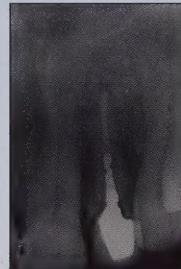
tooth reveals that an extraction would result in severe bone resorption. So whether a fixed bridge or an implant were chosen to replace the natural tooth, a severe aesthetic problem would result.



Natural tooth to be extracted.



#22 extracted; exhibits a vertical fracture.



Radiograph showing bone loss associated with vertical fracture and before removal of tooth.

Examination

Client is generally in good periodontal health with tooth #21 and #23 exhibiting minimal attached gingiva. Probing revealed bone levels significantly higher than the CEJ. Tissue around tooth #22 showed swelling, suppuration and bleeding. Tooth #22 was indicated for immediate extraction.

Treatment Options

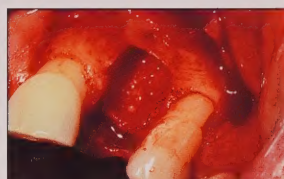
1. Fixed bridge, #21 and #23 are free from restorations at this time.
2. Free standing implant.
3. Removable partial denture.

The first step in the treatment plan is to remove the hopeless tooth. Whatever treatment for tooth replacement was chosen, it was recommended that the client opt for guided bone regeneration. This would regain lost alveolus and prevent the presence of an unsightly hard and soft tissue defect after healing at the site of the extraction.

The client rejected option #3 for tooth replacement and chose to undergo guided bone regeneration. After six months of healing, the decision to replace the tooth with either a fixed bridge or implant could then be made.

Surgical Procedure

1. Tooth #22 was extracted atraumatically to preserve as much bone as possible. The tooth exhibited a vertical fracture and all the facial bone had been destroyed by the disease process.



All facial bone has been destroyed by the disease process.



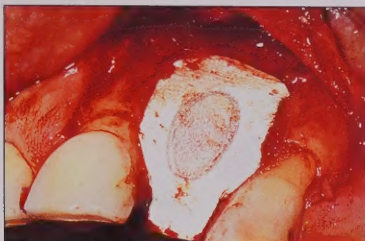
Defect before treatment.

2. Full thickness flaps were reflected facially and lingually extending to mesial of #21 and distal of #23 to provide room for the augmentation membrane and to minimize any soft tissue recession post-operatively.
3. Root surfaces of #21 and #23 were carefully root planed.
4. The bony defect was carefully debrided and then filled with decalcified freeze-dried bone which will act as a scaffold to prevent the membrane from collapsing (studies indicate bone morphogenic protein (BMP) in freeze-dried bone may stimulate bone regeneration).



Placement of freeze-dried bone in large bony defect.

5. The defect was then covered with GoreTex™ augmentation membrane to isolate the defect from the surrounding soft tissues and to create an envelope for bone regeneration.



GoreTex™ augmentation material in place.

6. The membrane was trimmed to prevent contact with the interproximal areas distal to #21 and mesial of #23 to avoid membrane exposure and infection.
7. GoreTex™ sutures were used to achieve primary closure.



Full thickness flap closed with GoreTex™ suture.

8. The client was placed on systemic antibiotic (ampicillin 500 mg every six hours) for one week to reduce the potential for infection.
9. The area healed uneventfully resulting in normal soft tissue contour.

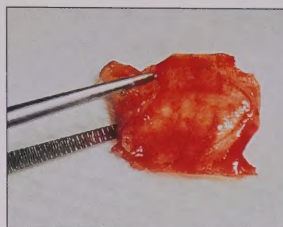


Membrane at six months before removal.

10. After six months of healing, the non-resorbent GoreTex™ membrane was removed. At this time, the client decided to choose an implant to replace the missing natural tooth. During the membrane removal, a 15 mm Nobelpharma implant was placed.



Radiograph showing bone repair before implant placement.



Membrane after removal.



Defect after healing and implant is placed.

Discussion

This case illustrates the importance of pre-operative planning. If tooth #22 had been removed with no thought to the loss of bony structure associated with healing, the client would have been left with an unsightly extraction defect which is extremely difficult to repair. By anticipating this result prior to treatment, the client was restored to normal functional form so that several treatment options that would not compromise aesthetics or function could be offered.

Note that the placement of the augmentation membrane was done at the same appointment as the extraction and the implant was placed at the same appointment as the augmentation material removal, therefore minimizing surgical trauma to the client. Today's standards of care demand that clients be advised of the best therapies available to them so they can make an informed decision regarding treatment. We no longer have to condemn patients to the disfigurement that may be caused by a hasty extraction with no regard to the consequences.

Results of Treatment

To date, the edentulous ridge has normal form. The successful implant is presently being restored with an implant supported crown.

Leanne received her diploma in Dental Therapy in 1981 and a diploma in Dental Hygiene in 1982 from WIAAS in Regina, Sask. She has been employed with Dr. C.G. Ibbott, a periodontist in Regina, since graduation. Leanne received her dental implant training at the University of Washington in 1988 and has been extensively involved with implant procedures. As well as teaching and providing continuing education courses (primarily in Western Canada), Leanne teaches a dental implant class to the second year dental hygiene students at SIAST. Students this year were the first to receive an accredited hands-on prosthetic course in cooperation with Nobelpharma. Leanne has published a number of articles in *Probe*, the *CDA Journal* as well as co-authoring articles for various international journals.

CLASSIFIEDS

Advertisers' Index

3M	57 (+ insert)
Block Drugs	40
Butler	OBC
Dentsply	IFC
International Association for Orthodontics	51
PerioReports	52
Perio Powerdents	49
Premier Dental	IBC
Procter & Gamble	52, 70, 71
Zila Pharmaceuticals	44-45

Dental Hygienist Comox, Vancouver Island, BC

We are looking for a conscientious, caring dental hygienist to join our progressive dental practice. This is an ideal full-time, permanent position commencing immediately.
(Part-time will also be considered.)

Call Helen (604) 339-4044 collect or send resume to
Dr. Martin Lamont, 2016 Comox Avenue, Comox, BC V9M 3M6

Northern Okanagan

Move to the Northern Okanagan, Salmon Arm – Sorrento area, for the quality of life. Full time dental hygienist required by
Drs. Jeff Nakagawa & Cedric Low.

Phone 604-832-7066
or write Box 1070, Salmon Arm, BC V1E 4P2



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

Your Professional Partner

CALL FOR CDHA VOLUNTEER CORPORATE RELATIONS

For details refer to page 52.

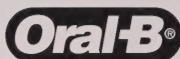
*Time is Running Out. . .
Register NOW for*



*The Public,
The Practitioner
The Profession*

**CDHA's 6th Annual Professional Conference
being held in Halifax, NS
June 23-25, 1995**

(See page 62 for registration information)



Sales Representative Professional Division

Oral-B Laboratories Inc., a leader in oral health products, has an immediate opportunity for a career oriented *Professional Account Manager*.

With **Alberta and Saskatchewan** as your territory, you'll call on dental professionals and authorized distributors with our leading products. Experience in territory management and sales is a definite asset for this challenging position requiring up to 40% travel. Registered dental hygienists with computer skills and/or a sales/marketing background will be given first consideration.

We offer an attractive remuneration package, company car, and the opportunity to further develop your dental career. Our upcoming training schedule dictates that we prioritize applications received early. Please respond in writing, by **March 31, 1995**.

Michele Christl
Manager, Professional Products Division
Oral-B Laboratories, Inc.
Fax: (905) 712-5545

Make a commitment to personal and professional growth. Subscribe today!

PHD Services
Dept. 563, P.O. Box 48808
Bentall Centre,
Vancouver, BC V7X 1A6

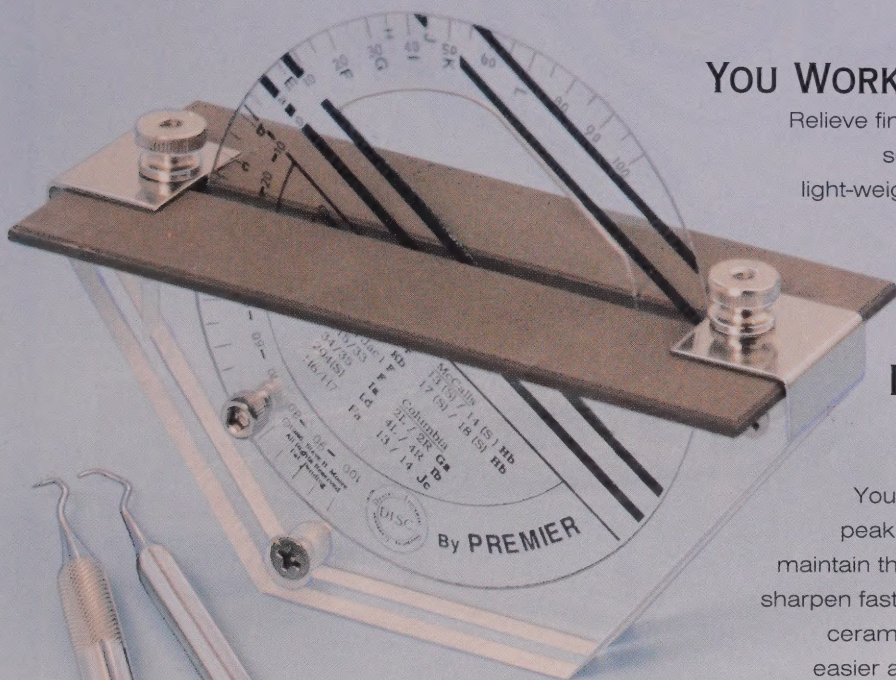
(604) 683-6604
phone/fax/voice mail

Six times a year **Professional Hygiene Development Services** produces **12 - 16 pages of hygiene related summaries and abstracts** from a wide variety of dental, hygiene and health related journals. **PHD Services newsletter** contains no advertisements and in some provinces **qualifies for CE credits**. Subscribe by phone or mail. Visa, Personal Cheque & Money Orders welcome. 1 year \$48.00, 2 years \$90.00, add 7% GST.

(Hesitant? Request a sample copy.)

EASIER SCALING

WITH SHARP, LIGHT-WEIGHT INSTRUMENTS



YOU WORK HARD ENOUGH!

Relieve finger fatigue associated with scaling procedures by using light-weight, LIGHT TOUCH™ hollow handle SCALERS and CURETTES from Premier®. Then keep them sharp with PREMIER® DISC™.

DISC™ SIMPLIFIES INSTRUMENT SHARPENING!

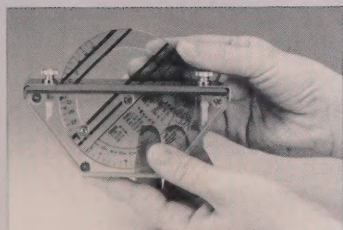
Your instruments are always at peak performance because you maintain the appropriate angle as you sharpen faster. And Disc's autoclavable ceramic sharpening stones clean easier and never need oil or water.

LIGHT TOUCH ROUND (LT) and OCTAGON (LTO) hollow handle SCALERS and CURETTES are made entirely of surgical stainless steel. The larger yet lighter handle is easier to grip to help reduce fatigue!

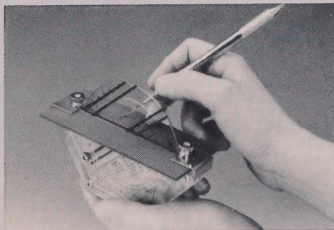
* Free goods provided by participating dealers. Dealer may lower price in lieu of free goods. May not be combined with other instrument offers. Offer expires 4/30/95



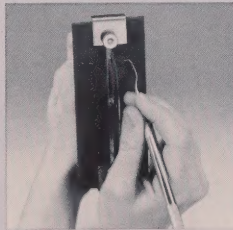
CALL FOR A FREE IN-OFFICE INSTRUMENT SHARPENING DEMONSTRATION.
ORDER THROUGH AUTHORIZED DEALERS.



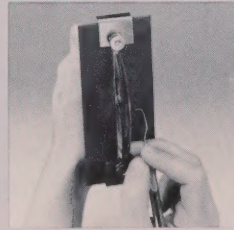
ROTATE PROTRACTOR DIAL TO APPROPRIATE ANGLE SETTING.



REST BLADE ON SHARPENING STONE WITH INSTRUMENT HANDLE HELD PARALLEL TO BLACK GUIDE LINES.



IN A FEW SHORT STROKES YOU WILL HAVE A PERFECTLY SHARPENED INSTRUMENT. IT'S THAT EASY!



Premier Dental (Canada), Inc. • 480 Hood Road, Unit #3 • Markham, Ont. L3R 9Z3 • 1-800-465-8455

BUTLER 

NEW!
EEZ-LOK® Loading

Portable Trav-Ler™
(Flexible Neck)

Three Different
Refills

Slender,
Double-Ended

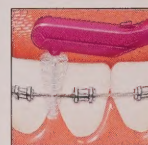
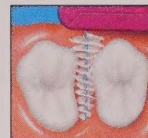
BUTLER
 **GUM**®

PROXABRUSH®

**DESIGNED WITH MORE
THAN ONE SOLUTION IN MIND**

Special dental needs demand special solutions. When it comes to cleaning a variety of areas toothbrushes cannot reach, the Proxabrush® System has the answers. Dentist-designed Proxabrush helps patients remove plaque from furcations, wide interproximal spaces, bridges, implants and orthodontic appliances. But this versatility extends beyond the product's applications. The unique features of the Proxabrush actually lead to increased patient compliance. The EEZ-LOK® loading design makes Proxabrush easy to load and the slender head provides access to even the tightest places. A double-ended design allows for different sized refills

on each end while three refill shapes eliminate the difficulty of cleaning different sized spaces. For patients on the go, the Trav-Ler™ adds portability and convenience. Give your patients the Proxabrush solution for their special needs.



John O. Butler Company,
515 Governors Road, Guelph, Ontario, N1K 1C7
1-800-265-8353

DENT

THE CANADIAN DENTAL HYGIENISTS ASSOCIATION
JOURNAL DE L'ASSOCIATION CANADIENNE
DES HYGIENISTES DENTAIRE

PROBE

VOL 29, NO 3

MAY/JUNE 1995 MAI/JUIN

DENTAL L
UNIVERSITY OF
124 EDWARD
TORONTO, ONTARIO, CAN

Lorraine Langevin,
Dip DH



WHAT'S INSIDE:

• DEVELOPING A KIT THAT INTEGRATES DENTAL INFO

• NDHC '95 SPECIAL INSERT

See You in Halifax in June at CDHA's
6th Annual Professional Conference

It Took A Few Years For Our Propy Paste To Become The Preferred Choice Of Hygienists But...



It Will Only Take A Minute For Your Patients To Feel The Same Way About Our New APF Fluoride Gel.



Nupro propy pastes are chosen by 7 out of 10 hygienists* because they combine exceptional cleaning and polishing properties within a non-splatter formulation. And in addition to unrivalled effectiveness, Nupro propy pastes offer unmatched selection of grits (4), flavours (5), and formats (single dose or 12 oz. jar).

The same innovative thinking has gone into the creation of Nupro Fluoride Gels. Maximum fluoride uptake provides greater protection while controlled viscosity and appealing flavours, (5 in Neutral/3 in APF) create superior patient acceptance. Both APF and Neutral formulations are available in convenient sized bottles with easy to use caps.

To order, call your DENTSPLY Canada distributor and start working with the most widely used family of propy pastes and fluoride gels.

A Division of DENTSPLY Canada Limited * Woodbridge, Ontario L4L 4A3

*Polk-Lepson Research Group

NUPRO™

(Ash) Hygiene Division

DENTSPLY
CANADA

Offering you the full treatment

Family Violence — An Issue of Our Times

By:

Joan Simpson and Sharon Amer

Although one can say that family violence is an issue of our times, the problem is by no means a new one. Though family violence has existed for a long time, as a society, only recently have we begun to understand the dynamics of this issue and to address the problems it creates.

What Do We Mean By Family Violence?

Family violence can be defined as a serious abuse of power within relationships of kinship, intimacy, trust or dependency. The violence may be physical, sexual, psychological, spiritual or financial in nature. According to this definition, then, *family violence*, includes violence in relationships of trust, e.g., by a friend or health professional; or of dependency, e.g., by a caregiver.

Why Is This Issue Important For Dental Hygienists?

As trusted members of society, dental hygienists in clinical practice see numerous clients during regular dental visits. While undertaking a thorough examination, both intraoral and extraoral, you will be checking the head and neck area. This can be a critical factor in identifying individuals who have been subject to physical abuse, since head and neck injuries are the most prevalent physical ones resulting from family violence.

Furthermore, as respected health professionals, dental hygienists have the opportunity to address this issue, along with others in the workplace and in the community at large. The dental hygiene profession, by continuing to undertake initiatives such as those described in this article, can proudly claim to be part of the solution.

Where We've Come From — Professional Associations, Educators, Practitioners and Government

With the help of resources provided through the Federal Family Violence Initiative, the Mental Health Division of Health Canada has been working in collaboration with the health community to help health professionals develop an enhanced awareness of the family violence issue and greater sensitivity in responding to people affected by violence in their lives. This work has been part of the overall government initiative involving seven federal departments and agencies, working in partnerships with all Canadians toward the elimination of family violence. Over this four-year time frame, the Division's objectives have been to facilitate



JOAN SIMPSON

better access to information, programs, and approaches, as well as to develop and expand resource materials.

The work of the Mental Health Division has spanned the broad issue of family violence, while recognizing the special vulnerability of women, children, older adults and people with disabilities. Special attention has been given to prevention, early intervention and effective screening approaches, as well as to appropriate responses to the needs of people critically affected by violence in their everyday lives.

Practice guidelines and curriculum approaches have been developed through collaboration with professional associations (like the CDHA), educators, service providers, voluntary organizations, and Health Canada programs. In addition, the Division's attention to the issue of abuse and neglect of older adults has resulted in enhanced resource and reference materials relating to both community and institutional settings.

What We've Accomplished — Dental Community Awareness and Response:

- Continuing attention has been drawn to the issue in professional journals like *PROBE*;
- *Family Violence Resource Materials for the Dental Community: An Annotated Bibliography* (1994);
- *Family Violence Handbook for the Dental Community* (in press);
- Increased attention to family violence issues — dental health professional **curricula**; new area for **accreditation**;
- Participation in the peer review of *Violence Issues: An Interdisciplinary Curriculum Guide for Health Professionals*;



SHARON AMER

- Linking educators and practitioners with available resource materials through the **National Clearinghouse on Family Violence, Health Canada**;
- **Vancouver FDI World Dental Federation Conference** (October 1994) — Presentation of table display on family violence initiatives undertaken by the Canadian dental community. Volunteers from the dental community across Canada staffed the display during the four days. Maxine Borowko, CDHA President, was one of these committed individuals.

Throughout the collaborative process undertaken by Health Canada and the dental community since mid-1992, many dental hygienists have played leadership roles in the consideration of this issue and appropriate approaches for the dental community. Those sitting on advisory groups and participating in peer reviews include: Myrna Frizell (Alberta), Audrey Newcombe (PEI), Joanne Clovis (Nova Scotia), Jenny Thomas (Ontario) and Margaret Wilson (Alberta). Their contribution has been invaluable, along with that of many other dental community members — dentists, dental assistants, dental therapists, educators and provincial representatives. Dental health professionals such as these can help us incorporate attention to family violence issues in all aspects of practice.

Available Resources

Whether you are in private practice, public health, industry, teaching in a dental hygiene educational program, or elsewhere, you can find many suitable resources to help you. Two of particular interest are the newly-released *Family Violence Handbook for the Dental Community*, and *Family Violence Resources for the Dental Community: Annotated Bibliography*.

(continued on page 84)

LISTERINE*

FIGHTS GINGIVITIS

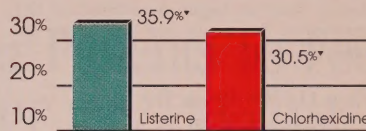
AS EFFECTIVELY

AS CHLORHEXIDINE.



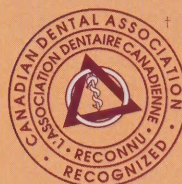
A recent clinical study[†] concluded that Listerine inhibited the development of gingivitis[‡] as effectively as 0.12% chlorhexidine. In fact, Listerine reduced the development of gingivitis by almost 36% over brushing and flossing alone¹.

% REDUCTION OF GINGIVITIS SCORES VS. CONTROL AT SIX MONTHS



* Equivalent for gingivitis reduction at 6 months ($p < 0.001$)¹

Unlike chlorhexidine, Listerine works without causing side effects like extrinsic tooth stain¹. Listerine is the only oral rinse, prescription or nonprescription, to receive the Canadian Dental Association's seal of recognition for efficacy in the reduction of plaque and gingivitis².



Twice daily rinsing with Listerine works synergistically with brushing, flossing and your professional care¹. If you'd like to find out more about Listerine call 1-800-683-1650. We'll give you all the facts.



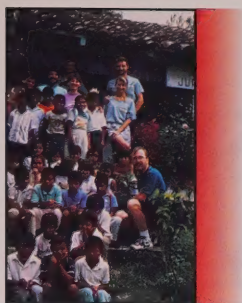
LISTERINE FIGHTS GINGIVITIS WITHOUT STAINING

[†] "Listerine helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care." CANADIAN DENTAL ASSOCIATION[†] Gingivitis was evaluated using the Modified Gingival Index. Listerine: Do not swallow. Not to be used by children under 12 years of age. Keep out of reach of children.

[‡] TM Warner-Lambert Company Warner-Wellcome Inc. use Scarborough, Ontario M1L 2N3

¹ Overholser CD et al. Comparative effects of two chemotherapeutic mouthrinses on the development of supragingival dental plaque and gingivitis. J Clin Periodontol 1990;17:575-579.

² Data on file, 1995.



COLLEAGUES FROM COAST TO COAST

Lorraine Langevin is a graduate of CEGEP F. X. Garneau in Quebec (1979). She is currently working with Dr. Amil Shapka and Dr. David Thomson in general practice in St. Paul, Alberta. From 1991-1993 she worked as a Colgate Palmolive Representative at Quebec and Montreal dental conventions. She worked in private practice in Quebec prior to moving to western Canada. She is an active member of CDHA, ADHA and the Ordre des hygiénistes dentaire du Québec. From 1983-1985 she was a member of the administration board of the Quebec Dental Hygienists Association and acted as the liaison agent between the provincial and national dental hygiene associations.

Editorial 79, 84

Family Violence — An Issue of Our Times
— Joan Simpson, Sharon Amer

President's Message 83

Challenges Stimulate Opportunities

Letters to the Editor 84

News 85

Scientific

1) The Collaborative Development of: GOING TO THE DENTIST: A Kit for Integrating Dental Information and Language Skill Development 89

— Mickey Emmons Wener, BS, Dip DH, MEd, Barbara Dick, BA, PreMED

2) Current Perspectives on Improving Chairside Dental Education for Adults 97

— A. Sheiham, R. Croucher (Reprint from the International Dental Journal)

Resource Centre — New Acquisitions 95

Feature 96

Beyond the Call of Duty...Providing Oral Health Care in the Honduras
— Lorraine Langevin, Dip DH

Practice Profile 101

— Nina Burnham, Dip DH

Self-Assessment Test 103

Radiography
— prepared by MWO Claude Bujold, RDH, Canadian Forces, Borden, ON

Abstracts 104

Parents in the Operatory
Staying Excited About Dentistry
— prepared by Carol Barr Overholt, Dip DH

Book Reviews 105

CDA Workbook on Infection Control:
A Companion to the CDA Guidelines on Infection Control
— Reviewed by Dianne Landry, Dip DH, Dip DN, BA, BV/TED
Risk Markers for Oral Diseases, Volume 3
— Reviewed by Master Warrant Officer Claude Bujold, Dip DH

Ethics: Sharpen Your Professional Edge 106

— Scott Rhude (Student, Dalhousie University, School of Dental Hygiene)

Continuing Education 108

CDHA's 6th Annual Professional Conference 110

Case Study 112

Immediate Dental Implants
— Leanne D. Carlson-Mann, Dip DT, Dip DH

Classifieds 114

The Canadian Dental Hygienists Association Journal: Probe is the official publication of CDHA. CDHA invites submissions of original research, discussion papers, and statements of opinions pertinent to the dental hygiene profession. All manuscripts are refereed anonymously. Contributions to Probe do not necessarily represent the views of the CDHA, nor can CDHA guarantee the authenticity of the reported research. Copyright 1995. All materials subject to this copyright may be photocopied for the non-commercial purpose of scientific or educational achievement.

CONTENTS



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

PROBE

MAY/JUNE
1995
MAI/JUIN

Editorial Director/Scientific Editor:
D. Landry, Dip DH, Dip DN, BA, BV/TED

Managing Editor:
J. Edgar, BJ

Statistical Reviewer:
R. Dunford, BSc, MSc

Contributors:
Carol Barr Overholt, Dip DH
Leanne Carlson-Mann, Dip DT, Dip DH
Nancy Neish, BA, Dip DH, MEd
Brenda Fortune, Dip DH

Editorial Board:
E. Brownstone, BA, Dip DH, MEd
S. Amer, Dip DH, MS
L. Boomhour, Dip DH
M. Goulding, Dip DH, BSc
L. Guest, Dip DH, BHE

Design:
Nancy Poirier Type Services

Published six times a year by the
Canadian Dental Hygienists Association,
Centrepointe Chambers, 96 Centrepointe Drive
Nepean (Ottawa), Ontario K2G 6B1
Tel (613) 224-5515
Canada Post Publications
Mail Registration No. 5793

CANADIAN POSTMASTER:

Notice of change of address and undeliverables
should be sent to the

Canadian Dental Hygienists Association
Centrepointe Chambers, 96 Centrepointe Drive
Nepean (Ottawa), Ontario K2G 6B1

Subscriptions \$69.55 (GST included) in Canada, \$110.00 Cdn.
for U.S. & \$115.00 Cdn. elsewhere. Fifty cents per issue is
allocated from membership fees for Journal production. All
statements are those of the authors and do not necessarily
represent CDHA, its executive, or its staff.

Advertising & Subscriptions:
Keith Health Care Communications
1382 Hurontario Street
Mississauga, Ontario L5G 3H4
(905) 278-6700

© CDHA 1995
6176 CN ISSN 0 834-1494
GST Registration no. R106845233



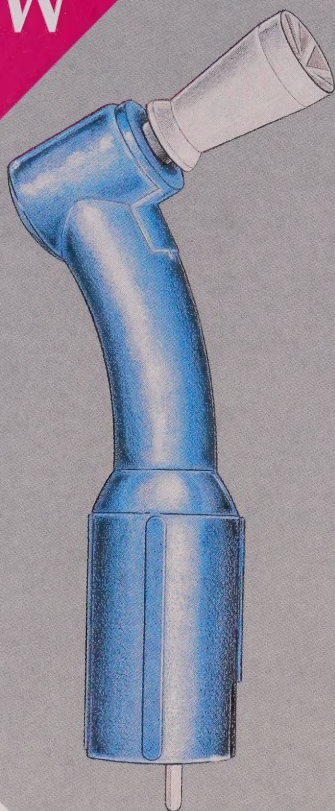
CDHA Central Office Staff

Executive Director	Carol Matheson Worobey
Manager, Publications & Conference	Janice Edgar
Financial Coordinator	Monique B. Rock
Member Services Coordinator	Sandra Vanwart
Member Services Assistant	Sue Turcotte
Administrative Assistant	Donna Awrey

All CDHA members are invited to call CDHA's Central Office,
toll-free, with their questions/inquiries:
1-800-267-5235, Fax (613) 224-7283
We look forward to serving you.

We're Bent on Making Your Prophies Easy . . .

NEW



the **CONTRA DISPOSABLE™ ANGLE**

by
Young Dental

- ◆ **Contra**
- ◆ **Control**
- ◆ **Comfort**
- ◆ **Convenience**

We're doing back-flips over our new angle! The Young Contra Disposable Propy Angle is the only disposable angle with a contra-bend in the neck, providing the control and comfort you're used to. It allows for greater access and reduces fatigue. And it's all available in a disposable. An easier cleaning is just around the bend.

YOUNG
DENTAL MANUFACTURING

13705 Shoreline Court East • Earth City, MO 63045
800-325-1881 • 314-344-0010

Contact Your Dental Supplier To Order

Challenges Stimulate Opportunities

New priorities are emerging. At CDHA's Board of Director's Annual Planning Session a rumbling that has been building for quite some time got closer to becoming a roar. Dental hygienists, from coast to coast, are voicing their recognition of a changing environment. They are aware that barriers prevent many Canadians from having reasonable access to dental hygiene care. They are also aware that many of these same barriers are preventing dental hygienists from creating new employment opportunities at a time when traditional dental hygiene positions are less secure.

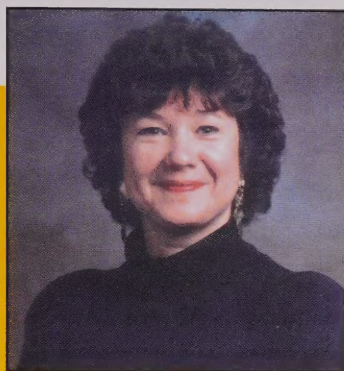
Changing employment arrangements, amended employer dental plans, an unpredictable economy and other similar trends are contributing to a sense of uncertainty. This is not unique to dental hygienists, and like other Canadians facing uncertainty, we are largely responsible for finding the solutions. Fortunately, progress comes from forces such as these: as people recognize the need to look beyond the status quo they often expand their horizons.

All across Canada we can see evidence of these forces starting to work. In British Columbia dental hygienists are starting to pursue employment in continuing care facilities. These opportunities will become more feasible thanks to changes in legislation and the establishment of the College of Dental Hygienists of B.C.. Regulations will soon permit specially qualified dental hygienists to work in various facilities without a requirement for supervision.

In Ontario, the government is mandating long term care facilities to care for the oral health needs of their residents. At the same time, more and more dental hygienists are entering into contractual arrangements with their employers. If we use our ingenuity, the combination of these two trends may create new ways to meet consumer and provider needs.

Forces at work in Alberta may soon act as a catalyst to improve oral health by making it possible for the people of Alberta to have direct access to dental hygienists. The motivation behind the necessary legislative changes appears to be coming from the government, the public and dental hygienists. This move is all part of a bigger goal in Alberta, which is to rationalize health care delivery, including increasing access to care and enhancing consumer choice, while decreasing costs.

The Atlantic and Prairie provinces are not without forces pressuring for innovation in health care delivery. Economic challenges are a powerful force affecting all sectors especially health care. The entire country is ripe for changes that improve access to reasonably priced primary health care services. More than



**MAXINE BOROWKO,
DIP DH, DIP DT, CERT VIT ED**

ever before, Canadians are concluding that we haven't done as well in the past as we could have; we can't afford a less than fair system; and we will have to do "something" about it.

Dental hygienists can significantly influence what that "something" should be when it comes to improving the delivery of at least oral health care as it relates to total health care. If dental hygienists take up the challenge, and the lead, they will not only be contributing to the health of the public, but to the health of their profession as well.

CDHA must also take some initiative to help develop opportunities for direct consumer access to dental hygiene care. To this end, many new projects have been proposed in the 1995/96 CDHA budget, aimed at developing the resources necessary to help dental hygienists meet the challenges ahead.

Stay tuned to the *PROBE*, Explorer and reports from your provincial directors, or contact Central Office directly, if you have a project, idea or opportunity you need help with. Keep in mind that CDHA is your professional partner.

Effective partnerships are made possible by people working effectively together. In CDHA this partnership includes members, elected and appointed representatives, all supported by central office staff. In closing, I would like to introduce you to this supportive group of individuals, starting with Carol Matheson Worobey, our dynamic and visionary Executive Director. For the past thirteen years Carol has been instrumental in facilitating the business of CDHA through strategic planning and liaising with outside agencies. She is also responsible for central office, staffing, operations and association management.

Financial Coordinator, Monique Belleau Rock is responsible for the Association's finan-

cial records and budget. She has been with the Association for more than eight years and works closely with Carol and the Executive Council, evaluating and advising on issues that impact the Association's financial security. In addition to processing the paperwork for all financial transactions, Monique works in partnership with Carol on special projects that impact the Association's financial holdings. Her background knowledge was instrumental in our recent decision to purchase "a new home". She even oversaw the construction phase as the building took shape.

Sandra Van Wart is the Association's Member Services Coordinator, in this role she is responsible for the membership department. She facilitates the membership renewal processes, updates and maintains CDHA's membership database and responds to member inquiries. Sandra also coordinates all CDHA membership campaigns and projects.

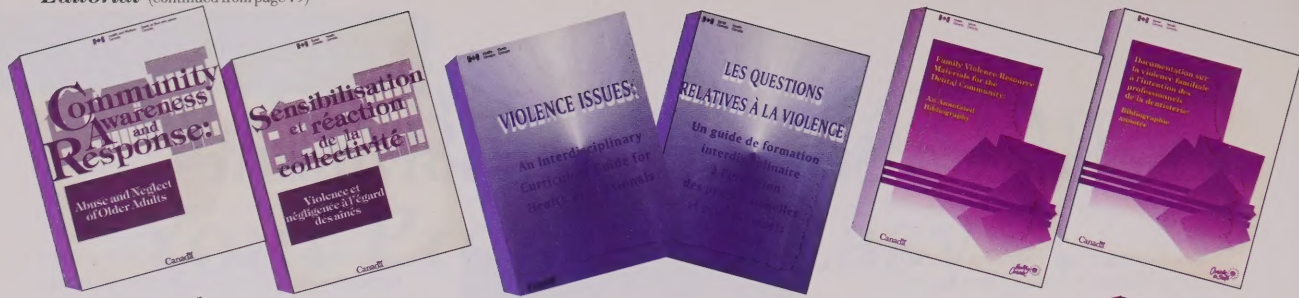
Sue Turcotte is CDHA's Membership Assistant, she assists Sandra in processing membership applications and changes and responds to membership inquiries from individual hygienists, provincial associations and licensing authorities. During the spring months, when membership is a little 'quieter', Sue provides valuable assistance to the conference coordinator, registering all delegates in the computer system and forwarding confirmation letters.

Donna Awrey is CDHA's Administrative Assistant and provides key administrative support, working closely with the CDHA Board, the NDHC coordinator and central office staff. In providing information services, Donna responds to all incoming calls and routes them accordingly. In many cases, they need not go further as she is a veritable *wealth of information*. As coordinator of the Association's Member Resource Centre, Donna can quickly identify and assist members with their information and NDHC requests.

Last but not least, there is Janice Edgar, CDHA's Manager, Conference and Publications. Janice oversees the production of CDHA's bi-monthly journal (you're reading it now!) and produces the Association's newsletter, Explorer. She also works closely with members of the Local Conference Organizing Committee to develop and coordinate CDHA's Annual Professional Conference (which we hope you are planning to attend June 23-25 in Halifax).

Central Office is indeed a hive of activity, and the efforts and activities of its staff are dedicated to you — the very heart of the Canadian Dental Hygienists Association. The Association really is your professional partner, and our tasks focus on providing service to you!





Challenges Ahead — Where We're Going:

With the many new resource materials now available dealing with this issue, the challenge that lies ahead is to support the integration of family violence issues into the everyday practice of dental health professionals. All of us — professional associations, educators, practitioners and government — have the responsibility for making this happen.

The challenge for the health field is to take on the issue in an integrated way as part of its ongoing work. Professional associations can play an important role by encouraging dental professionals, whether they are currently in practice or training, or responsible for curriculum—development and continuing education, to make effective use of existing resource materials.

We Are All Part of the Solution — Some Ideas

- Read *Family Violence Handbook for the Dental Community*.
- Identify and meet with programs in your community supporting people affected by violence.
- Offer to help a local shelter for women and children.
- Work with your professional association to plan activities.

Contacts:

For family violence publications and information:
National Clearinghouse on Family Violence, Health Canada
Tel: 1-800-267-1291 Fax: (613) 941-8930

For copies of dental/family violence publications:
Publications, Health Canada, Tel: (613) 954-5995 Fax: (613) 941-5366

LETTERS TO THE EDITOR

Dear Editor:

Thank you for providing us with such a professional journal in *PROBE*. I enjoy every issue.

As a dental hygienist in general practice for many years, I have a substantial collection of children's (patient's) artwork with their perceptions of dental visits and tooth home care, some quite artistic, others just plain 'adorable'. Many decorate the operatory walls for all to enjoy. On the receipt of newer entries, older ones are taken down and held in a special binder in the reception area for anyone to browse through.

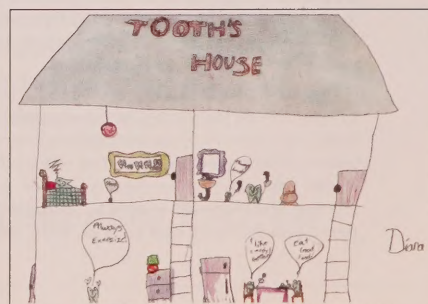
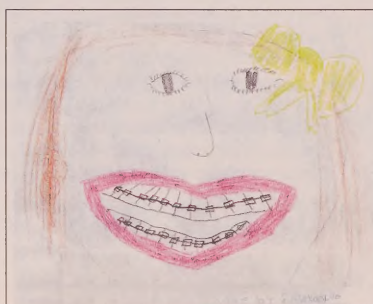
Would you be interested in publishing some of these? The children would be thrilled to know that they are worthy of publication and inclusion in our journal (no copyright infringements either!). I have enclosed a few copies of the "originals", some of which are painstakingly coloured in.

Please feel free to contact me if you are interested. Perhaps you could include a) one per issue, or b) a "Barnes Exhibit" aka *PROBE* Exhibit to encourage others to enjoy this fun and educational practise in their offices.

Yours truly,
Sue Crack, Toronto, ON

Ed Note:

We would consider using children's artwork on the cover of our Journal if the submission was an original that would reproduce well. That being said, we would encourage submissions that focus on the role of the Dental Hygienist in oral health care and preventive activities. Your comments, ideas and suggestions in response to Sue's letter are welcome.



Executive Council

President
Maxine Borowko
President Elect
Margery (Marnie) Forgy
Vice President
Sue MacIntosh
Past President
Fran Richardson

Member Services

Chair, Aileen Seed
Diane Skene

Audrey Newcombe
Luisa Mohan
Barbara Hewton

Health Promotion

Chair, Judy Parker
Sharyn Milroy
Wanda Staples
Patricia Noble
Heather Tommy

Practice & Regulation

Chair, Judy Clarke

Darlene Armstrong
Pamela Vokey
Sue Raynak
Kathleen Adams

Professional Development

Bonnie Craig
Charla Lautar
Stephanie Nagle
Eleanor McIntyre
Corinna Recker

Health Canada Representative to Board
Sharon Amer

Corporate Relations Officer
Joan Degan

Speaker
Lynn James

IFDH Representatives
Dale Scanlan
Ellen Brownstone

NDHC Coordinator
Dawn Mueller

NEWS



The Canadian Dental Hygienists Association
L'Association Canadienne des Hygiénistes Dentaires

Your Professional Partner

National Budget: Taxation Outcome

As you are now aware, Federal Finance Minister Paul Martin did not alter taxation regulations impacting on health benefits. The CDHA Task Force on Third Party corresponded with members of the Federal Taxation Committee, who report to Mr. Martin, to share CDHA's views on the matter.

As CDHA members are aware through last month's newsletter, CDHA gathered a significant amount of background information to present to members to provide for a recognition of the pros and cons of both sides of this issue. Upon completion of this review, and following dialogue with finance committee members and Paul Martin's office, CDHA's Third Party Ad Hoc Committee drafted a position statement which was endorsed by the Board in January and published in the March/April issue of *PROBE*.

Following Board Approval, the position statement was forwarded to the Minister of Finance, Federal Opposition Leaders, the Minister of Health, Federal Finance and Health Critics and Liberal MPs. CDHA also shared its position statement on the tax exempt status of dental insurance benefits with all provincial financial ministers and deputy financial ministers, all provincial health ministers, deputy health ministers and provincial health critics, provincial dental hygiene associations, national and provincial dental associations, and dental and dental hygiene licensing authorities.

Thank you to all CDHA members who forwarded the letter to Finance Minister Paul Martin, which appeared in the December issue of *Explorer*. Mr. Martin acknowledged your contributions to the debate in a letter directed to CDHA President, Maxine Borowko.

College of Dental Hygienists of British Columbia Appoints Registrar



A news release dated April 4, 1995 announced that Nancy Harwood was appointed as Registrar of the College of Dental Hygienists of British Columbia (CDHBC) effective immediately.

Ms. Harwood, a 1975 dental hygiene graduate of the University of British Columbia and 1985 graduate in law from the University of

Victoria, has practised as an educator, in general and specialty clinic practice, and in community health. Ms. Harwood spent nine years with the provincial government providing financial, policy and procedural analysis and advice to various committees of the provincial cabinet, and implementing new freedom of information legislation. She recently worked with the British Columbia Dental Hygienists Association on self-governance for dental hygienists.

Ms. Harwood and her husband are fourth generation Victorians.

College of Dental Hygienists of British Columbia Elects Chair & Vice-Chair



Ms. Darlene Thomas, a 1964 dental hygiene graduate of the University of Alberta was elected as Chair of the College of Dental Hygienists of British Columbia (CDHBC) by its Board in March.

Ms. Thomas is currently in full-time clinical practice. She was appointed as Assistant Professor at her alma mater in 1968, where she practised as an educator until her move to British Columbia in 1979. She has served as President of the Interior, British Columbia and Alberta Dental Hygienists Associations, and as a director at the national level, as well as a dental hygiene representative to regulatory committees under the previous governance system for dental hygienists.

Ms. Thomas lives in Vernon, BC with her husband and two children.



Ms. Carol Kline of Vancouver was elected as CDHBC's Vice-Chair. She is a graduate of the Universities of Washington (BSc and Dip DH) and British Columbia (MA). She is a practising dental hygienist and an active participant in the profession and several public service groups.

She recently retired as Placement Chair for the British Columbia Dental Hygienists Association and continues to act as the Association's archivist. Ms. Kline was Community Services Coordinator with UBC's dental hygiene program for twenty years.

She is a lifetime Vancouver resident. She and her husband, Terry, have three children.

Information Sharing With Our American Colleagues

Members of CDHA's Executive Council met with American Dental Hygienists Association (ADHA) representatives in Chicago, March 2-3, 1995. Numerous issues of common interest were discussed and ADHA shared details about its 1995-1998 Strategic Plan. CDHA Executive noted that ADHA's goals and its strategies to fulfill those goals remain remarkably similar to those held and followed by CDHA.

During the meeting ADHA confirmed its commitment to self-regulation for its members and was eager to learn about the progress made in this area in Canada in the past year. CDHA presented a thumbnail sketch of where each province is in terms of self-regulation. Representation on dental boards and supervision issues were also discussed.

According to ADHA Executive Director Stanley Peck, *Managed Care* is the Association's top priority this year, a priority which parallels, in many ways, CDHA's interest in health care reform and the change to 'the wellness model'. Stanley notes that delivery of health care in managed care settings presents tremendous opportunities for dental hygienists. Dental hygiene is a natural fit with the prevention and cost-savings orientation of managed care plans because dental hygienists are preventive oral health professionals who provide cost-effective, quality oral health care. According to Stanley, in the United States increasing pressure to reduce health care expenditures will ensure the trend towards managed care continues to pick up speed. The rise in managed care plans in the U.S. was cited as the key factor in last year's 1.1% decline in health care costs, as many workers shifted from traditional insurance plans to less expensive managed care plans. The percentage of insured employees enrolled in managed care programs in the U.S. increased to nearly 63% in 1994, from approximately 53% in 1993.

CDHA representatives at the meeting included President Maxine Borowko, President-Elect Marnie Forgay, IFDH Representative Ellen Brownstone and Executive Director Carol Matheson-Worobey. ADHA representatives present included President Kathy Alvarez, President-Elect Gail Bemis, Past President Sarah Turner, IFDH Representative Mary Alice Gaston and ADHA Executive Director Stanley Peck.

Dental Hygiene Profession Mourns Loss of One of Its Bright Lights

The CDHA joins colleagues from coast to coast as they mourn the tragic loss of Andrea Claire Brennan, a valued and committed member of our profession. Andrea, 28, was the victim of a tragic accident at Peggy's Cove. She was washed off the rocks by a rogue wave and swept to sea on February 5, 1995 while visiting the province's best-known tourist destination with a friend.

Andrea was a graduate of the Sydney Academy where she was a proud member of the school band. In 1988 she earned a Bachelor of Science degree from Dalhousie University and in 1990 she received a Diploma in Dental Hygiene from Dalhousie. She was an active member in Nova Scotia's music community and performed at several Kiwanis Music Festivals in the past. Andrea also taught piano lessons privately and was an organist for St. Joseph's Parish junior choir. She was also an active member of St. Mary's Basilica.



Following her graduation from Dalhousie's Dental Hygiene program Andrea became secretary for the Nova Scotia Dental Hygienists Association (NSDHA). She served as NSDHA President from 1992/93 and was a member of the Executive for several years.

As NSDHA President Andrea devoted much time and effort to improving the Dental Act of Nova Scotia and regulations governing the profession. She was an active member of the NSDHA Regulations Task Force and chaired the Association's Legislative Committee. Andrea worked tirelessly at presenting NSDHA's views on the act and

regulations to the province's Ministry of Health.

Andrea took great care to keep the NSDHA membership up-to-date and informed on all her activities. She often presented her findings with a pinch of humour to help members keep the issues in perspective. She contributed a regular column to the Association's newsletter 'Unison' entitled "Straight Talk" in which she further documented her efforts and kept the membership informed. When the regulations were passed without address-

ing the changes lobbied for by NSDHA Andrea stepped up her efforts and planted the seeds to help dental hygienists in Nova Scotia achieve self-regulation. Self-regulation for dental hygienists practising in Nova Scotia was one of many dreams Andrea sought to make a reality. She was also a member of the 1995 CDHA Annual Professional Conference's Local Organizing Committee and her engaging

personality and enthusiasm will be sadly missed when the profession gathers in Halifax in June.

Andrea's many friends and colleagues in Nova Scotia and across Canada miss her. One of the Maritime's bright lights has been extinguished and it is indeed a loss for all those who loved her and the profession to which she belonged.

The family has suggested donations in memory of Andrea be forwarded to any of the following charities: any palliative care unit, the Victorian Order of Nurses, a transition house of your choice or any special fund developed to assist dental hygiene students.

Have an ethical problem? Don't know where the boundaries are?
Need help to make a decision?
CDHA Code of Ethics — Read it!

CDHA In the News: On the International Scene

Two recent articles focusing on the dental hygiene profession in Canada were published in the Summer 1994 issue of the journal of the South Africa Oral Hygienists Association. The issue's International News section carried an article submitted by Swedish IFDH Director,

Kerstin Ohm, that highlighted activities of the CDHA Research Conference held in Niagara Falls in October 1993. Another article focusing on the establishment of the College of Dental Hygienists of British Columbia was also published in the journal.

NDHCB Examination Committee Struck

Canada's National Dental Hygiene Certification Board (NDHCB) has identified the six individuals who will form the first Examination Committee for the development of the National Certification Examination. There is one member representative for each of the following categories: **Western Canada** (BC, AB, SK) — Marnie Forgay, Dip DH, MA, PhD (Hon), **Central Canada** (MB, ON) — Laura MacDonald, Dip DH, BScD, MEd, **Eastern Canada** (QC, Atlantic provinces) — Kim McGrail, Dip DH, **Education Standards Workshop** — Eleanor McIntyre, Dip DH, BA, MEd of Ontario, **Community Health** — Sandra Cobban, Dip DH of Alberta and **Private Practice** — Anne Wiseman-Raymond, Dip DH of Ontario.

The committee had its inaugural meeting in Ottawa April 7-9, 1995 at a workshop facilitated by experts from the Canadian Nurses Association Test agency (CNAT). The initial steps for examination development were taken at the workshop. The members identified what the examination will measure in terms of the knowledge, skills, abilities, attitudes and judgments that dental hygienists beginning practice must possess. These competencies will be incorporated into a 'blueprint document' that will guide the work of the test item developers, inform examinees about the expectations (how they might prepare themselves for taking the test) and provide information to other potential users (eg. educators).

Each province has been asked to convene a group of content experts to form a Focus Group to review the draft list of competencies written by the Examination Committee. Comments from the Focus Groups will then be collected, summarized and documented by CNAT for review by the Examination Committee. CNAT, among other things, will also be responsible for training item writers, inputting items into a test bank, assisting the Examination Committee in setting a justifiable passing mark and translating the examination.

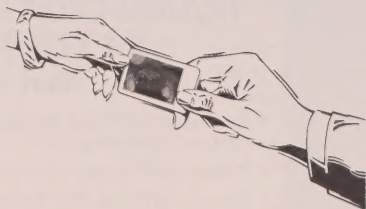
Item Writing Workshops to Be Scheduled in July/August

Four *Item Writing Workshops* are scheduled for the end of July and beginning of August. One workshop will be held in Calgary, with representation from British Columbia, Alberta and Saskatchewan. Two workshops will be held in Ottawa with representation from Manitoba and Ontario and one will be held in Halifax with representation from Quebec and the Atlantic provinces. Each workshop will be of a five-day duration. Details of the exact dates and times will be forwarded to provincial regulatory bodies and associations as they become available.

Participants in the item-writing workshops will be selected from dental hygiene educators across Canada. For more information please contact Dianne Landry, A/ Administrative Officer for the NDHCB at (613) 837-3377 or Fax (613) 837-6971.

Light at End of Carpal Tunnel

A short news item in the *Journal of the Canadian Medical Association* noted that University of Toronto researchers have developed a new treatment, low-energy photon therapy, for carpal tunnel syndrome. The news, which was also reported on in a brief article in *Chatelaine*, reported that with the new procedure, researchers apply red and infrared light to the affected hand and certain other areas, such as the shoulder. Norman Salansky, chief scientist at International Medical Instruments reported that after 21 patients received treatment three times a week for five or six weeks, 15 reported



complete relief of symptoms, and two experienced partial relief.

To obtain articles on CTS, members may wish to call CDHA at 1-800-267-5235 and ask for the CTS information file.

University of Manitoba To Confer "Professor Emerita" Title on Marnie Forgay this June

On February 23, 1995 the Board of Governors of the University of Manitoba approved the appointment of "Professor Emerita" for Doctor Margery (Marnie) Forgay. This title will be conferred on Dr. Forgay at the University's Convocation Ceremony on June 1, 1995. It is being awarded to Dr. Forgay for her distinguished service to the University of Manitoba and her significant record in teaching, research and scholarship.

Dr. Forgay earned a Diploma in Dental Hygiene from Eastman Dental Dispensary in Rochester, New York. She holds a B.A. degree from the University of Saskatchewan, a B.Ed. from the University of Manitoba, and a M.A. from the University of British Columbia. Dr. Forgay is the founding Director of the School of Dental Hygiene at the University of Manitoba, where she provided 32 years of service. She served as Director from 1963 until 1976, and later twice served as Acting Director. In 1985 she was appointed Director of the School of Dental Hygiene at Dalhousie University for a five year term, by arrangement with the University of Manitoba.

Dr. Forgay has been an outstanding teacher and leader in the development of dental hygiene education, research and practice for over 30 years. Within the last ten years she was awarded research grants totaling \$110,000. She is an international adviser on all aspects of dental hygiene; having made 40 presentations throughout North America. Dr. Forgay is currently President-Elect of the Canadian Dental Hygienists Association. Last May she received an Honourary Doctorate of Laws Degree from Dalhousie University in Halifax, Nova Scotia.

Professor Forgay resigned her position from the School of Dental Hygiene at the University of Manitoba on August 1, 1994.

Fifty Years of Water Fluoridation in Canada

Fifty years ago, on June 20, 1945, the City of Brantford was the first in Canada, and one of the first three in the world, to initiate fluoridation of its municipal water supplies to improve the oral health of its citizens.

Thirty-two years ago more than 600 Canadian communities, with a population of over 8.5 million, were enjoying the protection and savings resulting from drinking water containing fluoride at, or near, the optimal level. Furthermore, in January 1978 Health Canada issued a statement that noted it 'was satisfied that fluoridation of community water supplies is the most important, practical and effective

public health measure currently available for safely and economically reducing the incidence of dental disease'.

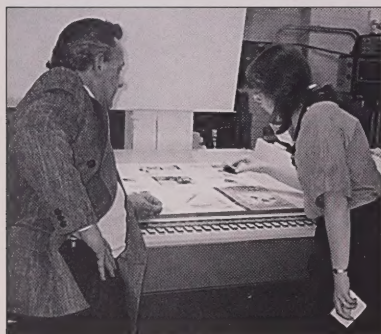
The introduction of fluoride into municipal water supplies marked another significant milestone — it opened new doors for dental hygienists interested in working for the federal government with dental researchers who were conducting landmark studies to evaluate the success of this initiative in Brantford, Sarnia and Stratford. It was during this time that dental hygienists were first hired by Canada's Department of Health.

ERRATA

In the 'News Section' of our January/February issue we reported that the Registrar of the Alberta Dental Assistants Association, Aldine Walling, co-facilitated a self-regulation workshop in Winnipeg. In fact, it was **Melanie Bachand**, who was Acting Executive Director/Registrar of the Alberta Dental Assistants Association, *at the time*, who co-facilitated the workshop. Our apologies for any inconvenience or embarrassment this oversight may have caused.

Hot Off the Press!

Editorial Director Dianne Landry and Managing Editor Janice Edgar took a tour of the M.O.M. plant in Ottawa — where CDHA's journal is currently printed. Below, M.O.M. Sales Representative Steve Anderson with Janice Edgar performing a *quality control check* on a 16-page signature of *PROBE's* March/April issue.



PROBE Reps at Editor's Internship Program



Two CDHA representatives participated in an Editor's Internship Program offered by the American Dental Association and held at the ADA Headquarters in Chicago in February. Probe Editorial Director Dianne Landry (front row, second from left) and Managing Editor Janice Edgar (front row, far left) were two of twenty participants. They were the only Canadian representatives, and two of four dental hygiene publication representatives. Other dental hygiene publications represented were *Pros & Contra Angles* newsletter editor Eleanor Vanable of the Rhode Island Dental Hygienists Association and *Alliance Matters* newsletter representative, Shirley Waite of the Alliance of the Wisconsin Dental Association. The program included a comprehensive overview of responsibilities related to publishing and included presentations focusing on editing, legal and ethical considerations, managing the finances of a publication, art and design and production.



PERIO POWERDONTICS™
EMPOWERING HYGIENE DEVELOPMENT

TEL: (416) 218-5575

One of the Nation's Leaders in Hygiene Development

TRANSFORM HYGIENE PERFORMANCE IN YOUR DENTAL PRACTICE

Start the process now with:

- Customized Soft Tissue Management Programs Implemented into your Practice with One-on-One Training
- Excellence in Diagnosing and Performing Periodontal Therapeutics of the 1990's
- Professional One-on-One Training in Advanced Clinical Skill Refinement
- Positioning Leading Edge Hygiene Technologies into Practice (i.e. Chemical Irrigation, Piezo Scaling, etc.)
- Motivated Team Players, and Increased Patient Acceptance through Empowering your Communication Skills.



PERIO POWERDONTICS™
Post Graduate Hygiene Education
Something For Every Hygienist

The Collaborative Development of: **GOING TO THE DENTIST: A Kit for Integrating Dental Information and Language Skill**

By/par :

Mickey Emmons Wener, BS, Dip DH, MEd
Barbara Dick, BA, PreMED

La rédaction en commun d'un cahier sur l'intégration de l'information dentaire dans l'apprentissage d'une langue seconde, intitulé **GOING TO THE DENTIST**

Why Develop a Dental Information Kit for English as a Second Language Teachers?

Real and imagined fears, financial strains, and an "I'll go when it hurts" philosophy are some of the barriers many clients face when seeking dental care. Imagine being a newcomer to Canada and having these barriers further complicated because you are unable to communicate in English!



**MICKEY EMMONS WENER,
BS, Dip DH, MEd**



**BARBARA DICK,
BA, PreMED**

Pourquoi rédiger un cahier d'information dentaire pour les enseignants d'anglais langue seconde?

Les craintes, réelles ou imaginaires, les contraintes financières et l'attitude d'« attendre que cela fasse mal », voilà quelques-uns des obstacles que beaucoup de clients doivent surmonter lorsqu'il s'agit de recourir aux soins dentaires; mais, supposons que vous venez d'arriver au pays. Le fait de ne pouvoir communiquer en anglais devient un obstacle qui complique davantage la situation!

Immigrants want and need dental information. Manitoba English as a Second Language (ESL) teachers and administrators have indicated that immigrants repeatedly express a need for dental information.¹ Similarly, in preparation for a health promotion program targeted at new immigrants and refugees in Hamilton, Ontario, a needs assessment revealed that, among other health-related topics, information was needed regarding dental care.²

To respond to this expressed need and to the apparent lack of an existing resource in this area, Manitoba Culture, Heritage and Citizenship, through its Settlement and Adult Language Training Branch, undertook the development of an adult ESL teacher's kit called *GOING TO THE DENTIST*. Two educators, whose backgrounds meshed both dental knowledge and practical experience teaching English to Canadian newcomers, were contracted to develop the kit. The project was overseen by the Coordinator of Adult ESL Curriculum Resources for the Settlement and Adult Language Training Branch*.

Canada's population has become increasingly diverse over the past few decades. Only thirty years ago, more than 80% of Canada's immigrants came from Europe or countries of European heritage. Today 70% come from Asia, Africa, or Latin America, with over 40% coming from Asia.³ In Manitoba, over half of all immigrants are non-English speaking. For refugees, the proportion is even higher (over 70%).⁴

For newcomers, a lack of English is frequently compounded by a lack of money and difficulties understanding and utilizing health, social service and immigration bureaucracies.⁵ Utilization of health services, adoption of preventive practices and responses to illness are actions which stem from an individual's cultural beliefs regarding health. For many immigrants and refugees, these beliefs are often at odds with a

Les immigrants veulent de l'information dentaire et ils en ont besoin. Les enseignants et administrateurs des programmes d'enseignement de l'anglais langue seconde au Manitoba ont indiqué, en effet, que les immigrants avaient à maintes reprises exprimé leur besoin en matière d'information dentaire¹. De même, lors de l'élaboration d'un programme de promotion de la santé à l'intention des immigrants et des réfugiés de la région de Hamilton (Ontario), l'étude des besoins avait révélé, parmi les sujets touchant la santé, qu'ils avaient besoin d'information au sujet des soins bucco-dentaires².

Afin de répondre au besoin ainsi exprimé et au manque apparent de ressource en cette matière, le ministère manitobain de la Culture, du Patrimoine et de la Citoyenneté, a entrepris, par le biais de sa Direction générale des établissements et de la formation linguistique des adultes, la rédaction d'un cahier à l'intention de ses enseignants de l'anglais langue seconde auprès des adultes, intitulé *Going to the Dentist*. On a confié le travail à deux enseignants dont la compétence alliait des connaissances dentaires à la pratique de l'enseignement de l'anglais aux néo-Canadiens, sous la surveillance du coordonnateur des ressources du programme d'enseignement de l'anglais langue seconde aux adultes, à la Direction générale des établissements et de la formation linguistique des adultes*.

La population canadienne s'est considérablement diversifiée aux cours des dernières décennies. Il y a à peine 30 ans, plus de 80 % des immigrants canadiens venaient d'Europe et des pays d'influence européenne. Aujourd'hui, 70 % viennent d'Asie, d'Afrique ou d'Amérique latine et 40 % d'entre eux, d'Asie seulement³. Au Manitoba, plus de la moitié des immigrants ne parlent pas l'anglais; chez les réfugiés, la proportion est encore plus élevée (70 %)⁴.

Chez les nouveaux venus, l'ignorance de l'anglais aggrave les problèmes dus au manque d'argent ainsi qu'aux difficultés de compréhension et

Western orientation to health.^{6,7,8} Regarding dental health needs, the literature suggests that certain ethnic and immigrant groups are less likely to have good oral health.^{9,10,11}

Because developing language skills is both an initial and ongoing priority for immigrants, ESL classes provide an ideal point of contact for health promotion. In 1990 it was reported that approximately 6,000 adult immigrants were involved in ESL instruction in Manitoba.⁴ ESL classes for newcomers are typically centered around the communication skills required for the learners to shop for food and clothing, go to the doctor, use the telephone, and other practical, immediate needs such as visiting the dentist. By enabling adult ESL teachers to provide health-related information, a hard-to-reach vulnerable group can be contacted in a timely fashion.

This article provides an overview of the developmental process of *GOING TO THE DENTIST*, includes samples of some of the instructional materials, and discusses some of the challenges and positive outcomes of the project.

What Steps Did the Developmental Process Take?

Early on it was important to establish parameters which would help to guide the development of the kit. It was determined that:

...the kit should:

- first and foremost, enable immigrants to *access* dental care
- be based on the needs of the learners
- allow students to integrate their own dental experience
- provide accurate dental content
- simplify complex information
- be visually based to accommodate low-level ESL learners
- enable students to communicate in a dental environment
- give teachers a variety of activities to use
- not duplicate an existing, similar resource

...the kit should not:

- provide information which should only be provided by dental professionals

The developmental process loosely followed the following steps, which in reality, were more cyclical than linear in nature. In other words, things happened when they needed to, rather than in adherence to a rigid plan.

1. Determine needs of learners
2. Gather pertinent dental content
3. Determine what ESL-Dental materials were currently available
4. First draft ... roughing out objectives, lessons and activities
5. Take photographs for support materials
6. Acquire existing intra-oral photographs
7. More drafts...
8. Expert feedback
9. More drafts...
10. Piloting and Refinement
11. "Final" draft
12. Production of complete kits
13. Distribution of kits

d'utilisation des services médicaux et sociaux de même que de communication avec les bureaucrates de l'immigration⁵. Par ailleurs, le recours aux services médicaux, l'adoption de pratiques préventives et l'attitude face à la maladie dépendent des antécédents culturels de chacun^{6,7,8}. Quant aux besoins en matière de soins bucco-dentaires, la documentation suggère que certains groupes ethniques et immigrants sont moins sujets à avoir une bonne santé bucco-dentaire^{9,10,11}.

Vu l'importance première que revêt, au début comme par la suite, l'apprentissage de la langue chez les immigrants, les classes d'enseignement de l'anglais langue seconde offrent un véhicule idéal pour promouvoir la santé. On signale qu'en 1990, quelque 6 000 adultes ont suivi ces cours au Manitoba⁴. Ceux-ci mettent surtout l'accent sur la communication nécessaire pour l'achat d'aliments et de vêtements, la consultation du médecin, l'utilisation du téléphone et d'autres besoins pratiques et immédiats comme la visite chez le dentiste. En aidant les enseignants de l'anglais langue seconde aux adultes à transmettre de l'information en matière de santé, on pourra toucher de façon opportune un groupe vulnérable et difficile à atteindre.

Cet article décrit comment on a développé le cahier Going to the Dentist. Il donne des exemples du matériel pédagogique utilisé, expose certains défis qu'il a fallu relever et fait part du résultat positif obtenu.



After contacting several city and provincial dental health departments, dental and dental hygiene national and provincial associations, and a few potential leads, it was determined that there were no similar resources in existence. It was time to get to work!

What Do Immigrant Dental Clients Need to Know?

Because the purpose of the kit was to enable adult ESL students to access dental care, the actual lesson topics were based on the specific needs expressed by the immigrant-serving community, as well as, the challenges that members of the dental community reported encountering when treating clients whose English is limited. These sources of information proved to be invaluable.



The immigrant-serving community expressed that the students need to know:

- how to find a dentist
- to seek care from *licensed* professionals
- that dental services are not covered by Manitoba Health
- what services are covered by different kinds of social assistance
- what their insurance entitles them to
- where they can go if they don't have much money
- not to agree to a treatment plan until they know how much it will cost and how they will pay
- the importance of providing (often with an interpreter) an accurate, detailed past and present health history
- common dental terms
- how to describe their symptoms
- how to ask questions like, "Why do I need this?"
- what a Canadian dental office, equipment, and instruments look like
- the importance of regular, preventive care

- that it is important to tell the dentist if you are pregnant, particularly if you are having X-rays
- the effect of anesthetic
- the importance of getting dentures checked



The dental community expressed that the students should know:

- how to make appointments
- the importance or providing (often with an interpreter) an accurate, detailed both past and present health history
- how to describe their problem
- the complexity of payment for dental services and the restrictions of various types of assistance
- the concept of recalls as part of a preventive approach to dental care

It quickly became evident that there were many important aspects to be addressed and that although a teacher might not use all of the information, it would not be comprehensive if these expressed needs were not adequately covered. As well, a decision was made not to focus on the needs of a particular target group (e.g., parents with young children, the elderly), but to approach it in a global fashion, leaving more specific topics for another potential project.

Based on the needs assessment and numerous discussions over numerous drafts, the lessons and materials were developed around these modules, topics and corresponding *OBJECTIVES*:

The student will:

MODULE 1: INTRODUCTION

Lesson 1: Dental Problems

1. Understand the reasons people go to the dentist.
2. Express several different common adult dental problems.
3. Be introduced to the dental philosophy in Canada and compare it to that in their first country.

Lesson 2: The Canadian Dental Office

1. Recognize and name the main rooms that they may see during a visit to a dental office.
2. Recognize and name the dental personnel in a dental office.

MODULE 2: GETTING READY TO GO TO A DENTIST

Lesson 3: Finding a Dentist

1. Identify different places where dental care is available in Manitoba.
2. Understand how to get a family dentist.

Lesson 4: How to Pay

1. Understand the different ways of paying for dental care.
2. Understand that how he/she pays for dental care will affect where he/she seeks care.

Lesson 5: Making an Appointment

1. Make a dental appointment.
2. Have a dental appointment confirmed.
3. Cancel a dental appointment.

MODULE 3: THE DENTAL VISIT

Lesson 6: The First Appointment

1. Understand what happens during the first dental appointment.
2. Know the importance of accurately completing the health history form.
3. Complete a sample health history form.

Lesson 7: Describing a Problem

1. Describe a problem to the dentist.

Lesson 8: Some Other Dental Procedures

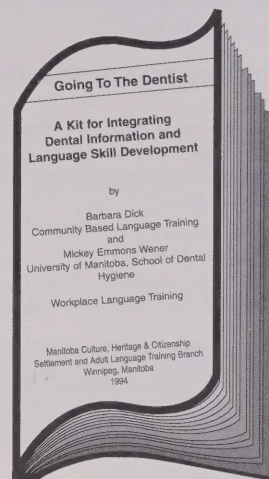
1. Be introduced to a variety of common Canadian dental procedures.

MODULE 4: REVIEW

Lesson 9: Review

What Is In the *GOING TO THE DENTIST* Kit?

The kit includes a 62 page manual which provides introductory information, suggestions on how the kit can be used, 9 lessons, additional teacher resources and a teacher feedback form. Each of the 9 lessons includes objectives, materials needed, vocabulary (new & review words), dental content, a lesson plan with suggested activities, and worksheets which utilize a minimum of print and are based on corresponding photographs/visuals. Adjuncts include 50-8x10, real-life, color photographs which coordinate with the lesson content, 10 laminated visuals related to paying for dental care, and "realia" (real objects they may see in the dental office, like gloves, mask, X-ray, saliva ejector, etc.).



The lesson plans incorporate a variety of suggested activities including discussion (e.g. about their previous dental experiences), vocabulary development (e.g. orally identifying content of pictures/visuals), or role-playing dialogues (e.g. making an appointment).

The intra-oral photographs were provided by University of Manitoba dental and dental hygiene faculty members. Additional resource materials were provided by a variety of dental sources, including the City of Vancouver Health department, the Canadian Dental Association, the Canadian Dental Hygienists Association, the Manitoba Dental Association, and the University of Manitoba School of Dental Hygiene.

How Was the Kit Piloted?

Following several drafts, selected members of the ESL and dental communities were asked to review the manual. Critiquing at this stage was critical to ensure that the materials were accurate and on target for the learners. Next, one of the authors conducted an initial pilot in a Community-Based Language Training program for Laotian adults. Once a "complete" kit was assembled, six adult ESL teachers were asked to use/review the materials and to subsequently participate in a feedback session with the developers and the project coordinator. The teachers reported on the comprehensiveness, flexibility, and visual effectiveness of the materials, but also provided some insightful information where changes were needed. The suggestions that were feasible were incorporated into the final copy. For example, it was suggested that the title and introductory material reflect that, although the worksheets and activities are developed for adult ESL students with low levels of literacy, the content is appropriate for any student, beginner to advanced, who has not been exposed to the Canadian dental system. In addition, they recognized that having a standardized health history translated into the most common languages encountered would be ideal for teaching and for immigrants to take with them when they seek dental care.

What Do the Materials Look Like?

The materials are very visual and simplified as exemplified by the following excerpts which focus on "The Canadian Dental Office" and "Describing a Problem".

A. THE CANADIAN DENTAL OFFICE

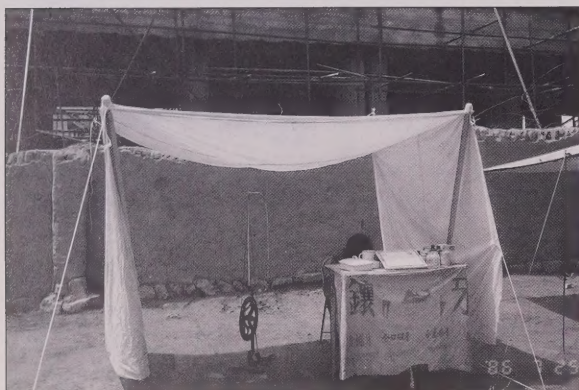
1. To encourage students to share their dental experiences in their first countries, as well as in Canada, a discussion is initially sparked by using a picture of a dental "office" in a marketplace in Tibet, China.

What was the dentist's "office" like in your first country?

Who worked in it?

How did they get their training?

How did they clean their equipment?



2. Using large pictures and a corresponding worksheet of the "dental rooms" and "dental people", the students are taught to identify what and who they might see in a Canadian dental office.

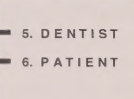
WORKSHEET 4A

THE CANADIAN DENTAL OFFICE

A. ROOMS

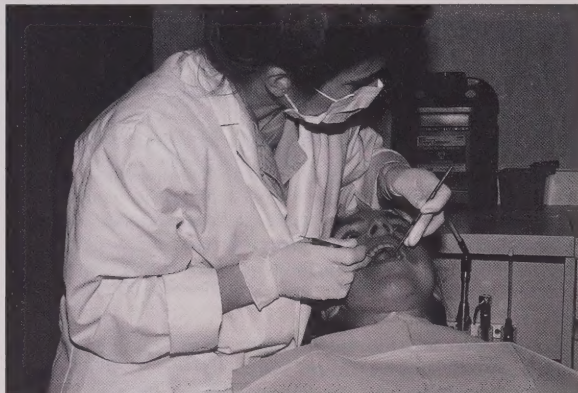
1.  WAITING ROOM	2.  DENTAL CHAIR ROOM	3.  STERILIZATION ROOM
---	--	---

B. PEOPLE

4. ASSISTANT 	5. DENTIST 	6. PATIENT 
7.  RECEPTIONIST	8.  HYGIENIST	9.  NURSE

3. The concept of preventing problems by going for checkups regularly in Canada is explained to the students.

In Canada, people go to the dentist even when they don't have problems. They go once or twice a year for a checkup. Why? They think it is important to keep their teeth for a lifetime, so they try to prevent problems by taking care of their teeth at home and by going to the dentist for a checkup. They don't wait until they are in pain. They know that ignoring dental problems can lead to losing your teeth.



This patient is getting her whole mouth, teeth and gums checked. The dentist is using a mouth mirror and an explorer. (This picture is used to teach the concept of a checkup, with this information provided on the back.)

B. DESCRIBING A PROBLEM

1. Using large pictures and a corresponding worksheet of a sample dialogue, the students can listen to and practice providing the kind of information the dentist requires to diagnose their problem.

Dialogue: Describing a Problem

D = Dentist

P = Patient

D: WHAT is the problem?

*P: I have a problem: with my tooth/teeth
with my gums
with my dentures
in my mouth*

D: WHERE is the problem? WHERE does it hurt?

P: POINT to the tooth/gum/area where the problem/pain is.

D: HOW LONG has it been a problem?

P: It has been a problem for 1 day, 5 days, 1 week, etc.

It has been a problem since last Monday, last week, September, etc.

D: DOES it hurt?

P: Yes, it hurts a lot.

Yes, it hurts.

Yes, it hurts a little.

No, it doesn't hurt.

D: WHEN does it hurt?

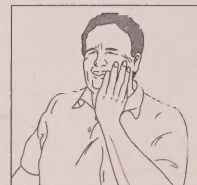
P: Sometimes.

All the time.

When I bite/eat.

When I eat something cold/hot.

When I sleep.



DESCRIBING A PROBLEM

WORKSHEET 13

A.

Dentist: What's wrong?
Patient: I have a problem with my tooth.

Dentist: Where is the problem?
Patient: Here.

Dentist: How long has it been a problem?
Patient: For 2 days.

Dentist: Does it hurt?
Patient: Yes, it hurts a little.

Dentist: When does it hurt?
Patient: When I sleep.

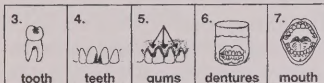


1. 2.

PRACTICE

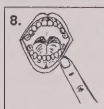
B.

Dentist: What's wrong?
Patient: I have a problem.



C.

Dentist: Where is the problem?
Patient: Here.



D.

Dentist: How long has it been a problem?

Patient: For _____

9.

MAY						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

 1 day
1 week

E.

Dentist: Does it hurt?

Patient: _____

0% 50% 100%

10. No, it does not hurt.

11. Yes, it hurts a little.

12. Yes, it hurts.

13. Yes, it hurts a lot.

F.

Dentist: When does it hurt?

Patient: _____

14. Sometimes.

15. All the time.

16. When I bite/eat.

17. When I eat something cold/hot.

18. When I sleep.

What Were Some of the Challenges of the Project?

- An ongoing challenge was the ever growing and changing nature of the content. In addition to revisions based on expert feedback, re-writing an almost finished product was required when the entire social assistance system for dental care changed midstream.
- It became a larger project than initially envisioned and many issues arose during the process which also slowed things down; therefore, the initial time line for the project was underestimated. What was initially thought to be a six month project, was closer to two and one-half years from needs assessment to distribution (fall of '92 to spring of '94).
- Regarding terminology, one of the initial challenges was deciding to refer to "the dentist" throughout the kit, for purposes of simplicity and clarity, rather than the more encompassing terms of "dental team", which wasn't always accurate or "oral health professional", which was too complex.
- At times, the line between what an ESL teacher should provide and what is best left to oral health professionals was fuzzy, particularly for individuals who weren't oral health professionals.
- The financial aspect was very involved and confusing and the most challenging of all the dental content to simplify. After spending many hours on the phone with federal, provincial and city employees who described the different kinds of dental assistance programs available to immigrants, it was quickly understood why newcomers find this area so confusing. Their confusion is complicated by limited access to full services due to their typically limited finances.

- The health history issue was challenging in that there appeared to be no existing standardized form that could be used. A generic form was developed that was identified as "for teaching purposes only". Ideally, the form, and most importantly, the complex medical terminology, should be translated into all the languages represented by the students. This, however, was beyond the scope of this project. Alternatively, students are instructed to take it to someone who can translate it for them. This is followed up by having the students complete the translated health history in class and encouraging them to take their form when they seek dental care.

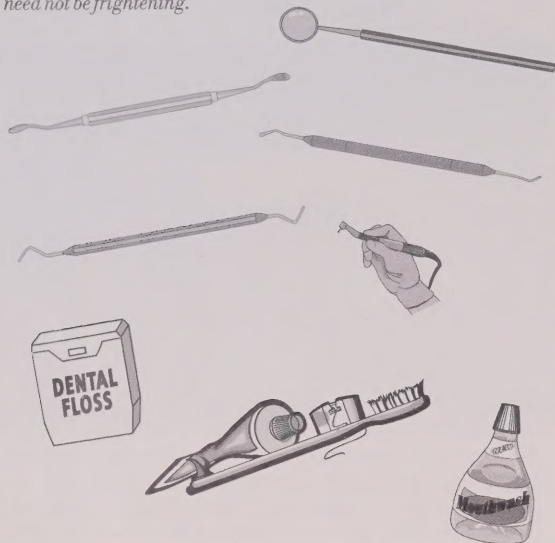
What Were Some of the Positive Outcomes?

- The positive feedback from the teachers and learners who had used the kit let us know that it was providing worthwhile information in an informative, interesting format. A comprehensive chart providing detailed information regarding the financial aspect of oral health care was identified as particularly helpful since this is an ongoing, major concern.
- The link between the dental and ESL communities proved to be very positive in that it sensitized the ESL community to oral health issues and simultaneously sensitized the dental community to the challenges faced by the immigrant community. For example, the teachers involved in the pilot indicated that the kit was quite instructional for them. By the end of the project, the non-dental author had definitely expanded her oral health repertoire!
- Gathering together existing translated oral health information from out-of-province dental health departments enabled the developers to include some with the kit and to begin a file which is accessible to dental hygiene and dental students at the University of Manitoba.

- Dental hygiene students have become increasingly involved with the ESL community and have used the kit as a resource for oral health promotion activities. For example, many of the visuals and some of the content were incorporated into a University of Manitoba School of Dental Hygiene Oral Health Fair held at an adult ESL school during the April '94 World Health Organization's first Oral Health Day. Topics included: "Making an Appointment", "A Dental Office" and "Finding a Dentist".

- Interesting information was brought to light. For example,

Many torture victims (particularly those who have been subjected to ill-treatment/torture by people using medically-related instruments or attire) have difficulties accessing medical services. They need to learn that such items are used for everyone during routine dental care, and need not be frightening.



Is There Any Unfinished Business?

Based on this project, both the immigrant and dental communities could benefit from the development of:

- a multi-lingual standardized health history form that could be used across Canada/North America;
- additional materials for the immigrant population that are for specific target groups, e.g. the elderly, parents with infants and/or school-age children; and
- current information for immigrants regarding purchasing and using over-the-counter dental products.

Future challenges include:

- Developing the body of literature which describes culturally specific beliefs and practices in the area of oral health in order for professionals to be able to plan and provide care that is in harmony with the client's beliefs and values.
- Enabling the dental community to increase their intercultural understanding and to remove access barriers in order to improve the oral health of the immigrant/refugee population.



Availability of *GOING TO THE DENTIST*

The primary target for the kit was ESL teachers in Manitoba. In order for these teachers to have easy access, ten complete kits and additional manuals were distributed to the libraries of the institutions that provide ESL instruction in Winnipeg.

Once it was determined that the kit would be appropriate for other ESL providers, dental institutions, or health departments, decisions had to be made about who would/could distribute the kit, who would be interested in purchasing the kit, what costs would be involved in producing more kits, etc. The discussion of these issues has resulted in Manitoba Culture, Heritage and Citizenship granting distribution rights to the authors.

Would We Do It Again?

Definitely. In spite of the challenges, a resource has been developed which has the potential to bring important oral health information to those who are very anxious to receive it. For example, the week following the pilot lesson during which students had learned to describe their problem, an elderly gentleman reported in class that he had sought dental care, saying, "I have a problem in my mouth." Another student reported that he was very pleased to have been notified at work that he was now eligible for dental insurance, a concept previously unknown to him. It is small steps like this that can *and do* make a difference in someone's ability to achieve oral health.

*Joanne Pettis served as the project coordinator for *GOING TO THE DENTIST* in her role as Coordinator of Adult ESL Curriculum Resources for the Settlement and Adult Language Training Branch.

Mickey Emmons Wener is an Assistant Professor at the University of Manitoba School of Dental Hygiene, coordinating Community Health II and the Externship program. She is also employed by Manitoba's Settlement and Adult Language Training Branch as a Workplace Language Training instructor.

Barbara Dick is an ESL teacher at Hugh John Macdonald Junior High School in the inner-city of Winnipeg. She also teaches adult newcomers in the Manitoba Settlement and Adult Language Training Branch's Community-Based Language Training program.

References:

1. Munoz, X. & Scott, J.: Written and telephone communication regarding student needs for dental information, Community-Based Language Training program, Manitoba Department of Culture, Heritage and Citizenship, 1992.
2. Edwards, N., Diliska, D., Halbert, T., & Pond, M.: Health promotion and health advocacy for and by immigrants enrolled in English as a second language classes. *Canadian Journal of Public Health* 1992, 83(2) 159-162.
3. Bowen Stevens, S.: *Community based programs for a multicultural society: A guidebook for service providers*. Winnipeg: Planned Parenthood Manitoba, 1993, pp. 1-2.
4. Hanning, D.: The new multicultural reality. *Social Planning Council of Winnipeg Newsletter* 1990, 1(3) 1, 4.
5. Anderson, J., Richardson, E., & Waxler-Morrison, N.: *Cross-cultural caring: A handbook for health professionals in Western Canada*. Vancouver: University of British Columbia Press., 1990, p. 6-9.
6. Buchwald, D., Caralis, P.V., Gany, F., et al: Caring for patients in a multicultural society. *Patient Care* 1994, 28(11) 105-120.
7. Majumdar, B., Carpio, B.: Concept of health as viewed by selected ethnic Canadian populations. *Canadian Journal of Public Health* 1988, 79, 430-434.
8. Lee, K.L., Schwarz, E., & Mak, K.Y.K.: Improving oral health through understanding the meaning of health and disease in a Chinese culture. *International Dental Journal* 1993 43(1) 2-8.
9. Lee, J., Kiyak, H.A.: Oral disease beliefs, behaviors, and health status of Korean-Americans. *Journal of Public Health Dentistry* 1992, 52(3) 131-136.
10. Pollick, H.F., Rice, A.J., & Echenberg, D.: Dental health of recent immigrant children in the newcomer schools, San Francisco. *American Journal of Public Health* 1987, 77(6) 731-732.
11. Selikowitz, H.S.: Oral health and immigrants: A study of the oral health and oral health behavior in groups of Vietnamese refugees and Pakistani immigrants in Norway. University of Oslo, Dental Faculty, Institute of Community Dentistry. Thesis: 1987.

ATTENTION: COMMUNITY HEALTH DENTAL HYGIENISTS, DENTAL HYGIENE EDUCATORS, PROFESSIONAL ASSOCIATIONS...

GOING TO THE DENTIST: A KIT FOR INTEGRATING DENTAL INFORMATION AND LANGUAGE SKILL DEVELOPMENT

Are you or your students involved with helping immigrant or refugee clients to understand:

- why people seek dental care (not just for pain!)?
- who provides oral health care?
- how and where to seek dental care?
- how to make an appointment?
- what happens at the "first appointment"?
- the importance and contents of a health history?
- what some common dental procedures entail?
- potential sources for paying for dental care?

*A kit for teachers has been developed by
MANITOBA CULTURE, HERITAGE AND CITIZENSHIP
which includes:*

- ♦ **MANUAL:** 62 pages, including 9 lessons with objectives, materials needed, vocabulary, dental content, lesson plans with suggested activities and 16 reproducible worksheets
- ♦ **COLOR PHOTOGRAPHS:** 50 - 8x10 laminated real-life photos to coordinate with the content and worksheets in the manual
- ♦ **VISUALS:** 10 laminated visuals related to paying for dental care (e.g. fee-for-service, assistance, insurance)
- ♦ **"REALIA"** 11 dental supplies accompanied by a brief description (gloves, mask, X-ray, saliva ejector, etc.)

The entire kit can be purchased for \$195.00, or in separate components:
manual - \$40.00, 50 color photographs - \$125.00, 10 visuals - \$25.00,
realia \$15.00 (plus shipping)

For further information, or if interested in purchasing the kit, contact:
Mickey Wener, 6 Exmouth Blvd., Winnipeg, MB, R3P 0C1,
ph: (204) 885-7180, FAX: (204) 896-0983

RESOURCE CENTRE — NEW ACQUISITIONS

Professional Video

"Great Gums/Tough Teeth": A training video for staff working with people with disabilities.
13 minutes (One available)

Public Videos

"Super Smiles": An educational video for parents and families of persons with disabilities.
13 minutes (One available)

"Crack Down on Plaque": An educational video for people with disabilities.
9 minutes (One available)

All videos are from Washington State, Department of Social & Health Services, Division of Developmental Disabilities.
©1994 DSHS/DDD

LISTERINE®

ANTISEPTIC - ANTIPLAQUE ANTINGIVITIS - MOUTHWASH

INDICATIONS: Helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care. Kills the germs that cause bad breath, plaque, gingivitis and sore throats due to colds.

CAUTIONS: Keep out of reach of children. Do not swallow. Not to be used by children under 12 years of age. In case of accidental ingestion, contact a Poison Control Centre or doctor immediately.

DOSAGE: Rinse full strength with 20 mL for 30 seconds twice a day.

MEDICINAL INGREDIENTS: Eucalyptol 0.091% w/v, Thymol 0.063% w/v, Menthol 0.042% w/v.

NON-MEDICINAL INGREDIENT: Alcohol.

NOTE: Cold temperatures may cloud this product, its efficacy will not be affected.

SUPPLIED:

Original Listerine: Clear, amber liquid available in bottles of 250, 500, 750, and 1,000 mL.

Cool Mint Listerine: Clear, blue, cool mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.

Fresh Burst Listerine: Clear, green, mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.



LISTERINE FIGHTS GINGIVITIS
WITHOUT STAINING

WARNER
WELLCOME
A Division of Warner-Lambert Company

*TM Warner-Lambert Company Inc. Use Scarborough, Ontario M1L 2N3
(P250)

Beyond the Call of Duty...

Providing Oral Health Care in the Honduras

By:
Lorraine Langevin, Dip DH

On October 7, 1994, seventeen people from Canada and the United States flew to the second poorest country in Central America, Honduras, to provide some much needed dental care. The group included seven dentists and ten "allied dental health personnel", four of whom had no previous dental experience. For most, it was our first trip of this nature, and not knowing what to expect, we expected the worst.

Organized by ourselves as an office project, our goal was to provide basic oral health services to the Honduran peoples, including examinations, extractions and oral hygiene instruction. This proved challenging, considering most locations had neither power or water, let alone a building to work within!

As the project grew, so did our goals, and we decided to make history by also doing amalgam restorations. This was the first time such services were offered by any dental team working in the region. It also meant bringing a portable generator and the equipment to perform such tasks, not to mention the need for flashlights to provide an adequate light source. We provided everything: equipment, supplies, drugs, as well as food, water and transportation. All the work was done voluntarily. Preparation and fundraising began months before, and trying to imagine everything we would have to bring, anticipating everything we might need, was indeed a challenge.

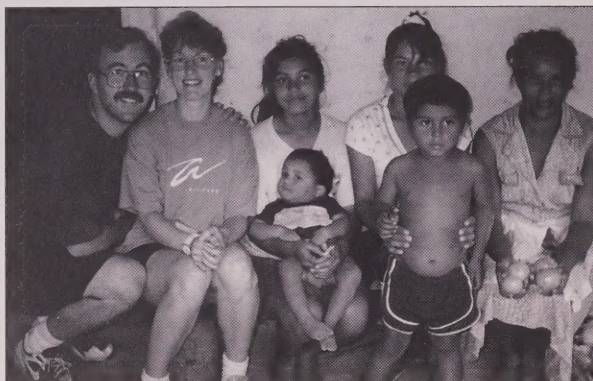
Upon our arrival, we set up a "main" dental clinic in the village of Villa San Francisco. It was in an empty school room without electricity and modest furnishings: a few tables to place our instruments on, and wooden chairs for the patients. Next to the chairs we placed large plastic bags to "escupe" (spit) into. Everyday the clinic got busier and busier as word got around that a dental team was in the village. Many people walked half a day just to come and receive treatment. We always arrived to large line-ups.

Our days started early, with wake-up calls from the roosters, donkeys and dogs (a symphony they were not!). Each morning we would split up into two groups. One group would stay at the clinic in Villa San Francisco, while the other would head out to a remote part of the area, to provide services to those unable to come to the village to receive treatment.

On my day trip I felt like I was on an 'Indiana Jones' adventure! We had to four-wheel drive into the areas because of the poor road conditions: rivers to cross and dirt roads with pot holes the size of

the vehicle. (Not to mention the number of times we had to swerve to avoid hitting a wide assortment of animals: dogs, pigs, cows and donkeys!)

We tried to treat all who came. Our working days were strenuous in the hot humid climate and averaged 9 to 10 hours. We stopped when we could no longer see because it was dark. Clinic conditions resembled a "MASH unit".



Lorraine Langevin (second from left) with Dr. Shapka (far left) and some of the clients they provided dental services to while in the Honduras.

A personal highlight was giving an oral hygiene demonstration (through a translator) to a class of 31 students aged 5 to 7 years. None of these children had ever seen a dentist or dental hygienist before. Quite likely, few had ever used a toothbrush.

Within the four and a half days we worked, we treated approximately 620 people, extracting 2050 teeth and placing 245 restorations. Despite having to turn tens of people away daily, we were proud of what we were able

to accomplish with what we had. The many people who supported us through donations of supplies, money and expertise can share in our success. As challenging as the week was, the rewards were far greater. It was an experience beyond words, and we are already preparing for next year's trip.

If you think that you would like to be part of trip like this, or are interested in supporting our efforts, please contact: Dr. Amil Shapka, PO Box 1334, St. Paul, Alberta, T0A 3A0 (403) 645-2232 or fax (403) 645-3576.

Lorraine Langevin is a graduate of CEGEPF. X. Garneau in Quebec (1979) She is currently working with Dr. Amil Shapka and Dr. David Thomson in general practice in St. Paul, Alberta. From 1991-1993 she worked as a Colgate Palmolive Representative at Quebec and Montreal dental conventions. She worked in private practice in Quebec prior to moving to western Canada. She is an active member of CDHA, ADHA and the Ordre des hygiénistes dentaire du Québec. From 1983-1985 she was a member of the administration board of the Quebec Dental Hygienists Association and acted as the liaison agent between the provincial and national dental hygiene associations.

Current Perspectives on Improving Chairside Dental Education for Adults

By:

A. Sheiham and R. Croucher, London, UK

Reprinted from the International Dental Journal (1994) Volume 44 with the kind permission of the Editor.

Summary

This paper reviews current knowledge about improving chairside dental health education for adults. It places this knowledge within a general context of change in clinical ideas about appropriate treatment and of evidence about the current practice of oral health education for adults. The acronym SPERMAID is proposed as a summary of the principles to be followed in the motivation of the adult patient.

Motivating adults to follow a prescribed effective oral health care program throughout life is a recognized problem for general dental practitioners¹. Some reviewers suggest that little progress has been made on adherence to oral hygiene regimens^{2,3}. Gift⁴ has argued that very little new information is currently available on the factors influencing tooth cleaning compared to 30 years ago. On a more positive note, in an extensive review of mechanical oral hygiene measures, Frandsen⁵ concluded that the efficiency of personal mechanical oral hygiene practices are more likely to be enhanced through an understanding of factors determining performance than by attempt to improve aids and techniques. In this paper it is suggested that current methods of chairside dental health education for adults have major shortcomings^{6,7} despite the efforts of dental teams to improve their techniques. In an attempt to shed some light on this important field of activity the current literature on general health education is reviewed and the implications for dental health education are considered.

The context of change

Over the last fifteen years concepts about the pattern, life-history and treatment of dental diseases have changed. As a result the dental profession has had to reassess the value of conventional treatments. What is perhaps not so well appreciated is that the public have also made changes in their health-related behaviours, behaviours which are not necessarily, consciously directed towards improving health. People have changed their eating and cooking habits, are taking more exercise and are generally more concerned about the environment. Self-care and skepticism about health professionals has become more widespread⁸.

The public have improved their oral hygiene practices⁹⁻¹². Most people now clean their teeth regularly. In industrialized countries, 80-90 per cent of the population brush their teeth one to two times a day^{5,13,14}. The situation is one of activity, not one of apathy. This activity, together with reduced cigarette smoking and the increased use of anti-calculus toothpastes¹⁵, is likely to lead to a reduction in calculus.

These increased levels of activity have taken place in a domestic background that offers little opportunity for flexibility and experimentation. The results of an investigation of urban working-class households showed that 70 per cent of the day (excluding sleep) was described as routine, whilst 90 per cent of the day was perceived by the respondents as lacking any real choice. Personal hygiene activities were considered to be the least flexible in terms of changing the times at which, and the locations where, they were carried out¹⁶. These findings were confirmed by Hunt and Macleod¹⁷ who reported that health-related behaviours exist, normally, at a routine level. Smoking, the amount of exercise taken, the kind of food bought and eaten, consuming a drink, are largely built into the flow of everyday activities in a way which is not easily accessible to 'health messages' because these behaviours are integrated with the individual's social relationships and adaptive processes. People are, therefore, changing health protective behaviours.

Current practices of oral health education by adults

The current practices of oral health education and concerns of adults can be characterized as follows^{13,18,19}.

- Oral hygiene instruction is seen by periodontal patients as a simple but incomplete uniform message in that a diagnosis was not given.
- The simple message required a complicated change in behaviour, especially if the use of floss was involved.
- Compliance with advice conflicted with what patients had learnt as children.
- Patients wanted more information on topics not usually addressed by professionals.
- People recognized that their gums bled but thought it was not a sign of disease. It was seen as a natural occurrence or a result of brushing too hard, the 'breaking in' of a new brush or the use of dental floss.
- Hygienists, perceived as low status members of the dental team, caused bleeding and that confused patients.
- Loss of control associated with their horizontal position in the dental chair, and not being able to ask questions were other concerns expressed by patients.
- The repercussions on the family of carrying out recommended oral hygiene measures were seen as barriers to change.

It is not surprising that few of these respondents felt confident about monitoring the status of their gums and that periodontal treatment was also expected by patients to make up for their often recognized inability to comply with professional advice. There are a number of possible reasons for this:

- The dental team is reported as having a fixed and inaccurate image of the public²⁰ tending to underestimate and misunderstand the efforts the public is already making in matters relating to their dental health.
- Traditional health education has been predicated on the assumption that various behaviours which affect disease are susceptible to change by planned programs carried out by professionals.
- The most common method of health education used in dentistry assumes a straight-line relationship between inputs of information and exhortation to change on the one hand, and movements of the learner toward changed beliefs and practices on the other⁶. This supposed sequence does not usually lead to permanent changes in behaviour^{7,21,22}. Tones²³ criticizes this approach as, firstly, simplistic, and secondly, unfair. He proposes that health professionals, including the dental team, adopt the ethically desirable goal of helping their patients make informed and self-assured choices. Information is a necessary but not a sufficient condition to making choices and changes.
- The dental professional has been educated to think chiefly in terms of therapy, repair and restoration, with little emphasis on education⁸. Its concern has been for disease prevention strategies, designed either to reduce risk-factors for specific disease, or to enhance host factors that reduce susceptibility to disease.

Dental professionals, therefore, appear to practise within the framework of an acute disease model. This approach implies little tolerance of symptoms perceived as falling outside narrowly defined limits of normal and for behaviours considered to be unhelpful to treatment objectives. The outcomes of chronic disease, which include the periodontal diseases, are affected by many factors. One of these is behaviour contributing to the disease. In this situation, a more appropriate approach is to concentrate on providing people with the skills for informed decision-making and oral hygiene practice. To do that, dental professionals should acquire a sound knowledge of health education, communication techniques and theories of health behaviour.



Implications for chairside dental health education

The current conventional health education approach has been assessed as not taking account of the determinants of health-related behaviours that are outside the control of individuals, a lack of relevance to the health concerns and information needs of the target audience and a prescriptive style of communication²⁴⁻²⁸.

No dentist will decide on a particular treatment for a patient without first undertaking a thorough diagnosis. A similar diagnosis — considering the individual and environmental factors which affect people's behaviours — must also be performed if health education is to have a chance of succeeding in stimulating more healthy practices.

The current objective of all informal and formal dental health education should be '...to foster negotiation and collaboration with dental practitioners so that patients might be helped to make informed choices'²³. Thus the key principle is to elicit, facilitate and support the maintenance of effective oral cleaning practices²⁷. To carry out this principle a planned, consistent and integrated series of educational strategies, should be adopted. The plan should be based on the following principles — SPERMAID:

Supportive health education

Intentional change is not an all-or-none phenomenon but a gradual movement through four stages: precontemplation, contemplation, action, maintenance²⁹⁻³⁰.

- The precontemplation stage is before people know or recognize the problem.
- In moving from precontemplation to contemplation people must become aware of the problem and habits associated with it. The negative aspects of the problem, as well as the positive and negative effects that may arise as a result of change, have to be recognized and evaluated. The seeds of change may be sown a long time before any change occurs and may, in the absence of an actual health problem, be triggered not by concerns for health, but by other factors such as financial worries, a change in social circumstances, or a change in employment. In the contemplation stage people are open to consciousness raising information, so the dental professional's communication skills and provision of health information become important. This information should encourage reflection on their experience, encouraging people to become aware of alternatives and their personal choices.
- Changes in behaviour are important during the action and maintenance stages³⁰. During the action stage people should act from a belief that they have the ability to change to a significant degree. Feelings of self-confidence can be enhanced by convincing the patient, through their activity, that they can successfully carry out the behaviour³¹.
- The maintenance stage is one of continued positive change²⁹. Relapse is common if the behaviour is difficult³². As the changes in oral cleaning practices required by most people are small and are concerned more with improving effectiveness than initiating a new behaviour, such a change should be readily achieved if people feel confident.

Not all patients are at the same stage of change³⁰. Each stage of change takes time and includes a set of tasks which have to be successfully accomplished before movement to the next stage. Movement

between stages will not necessarily correspond to a series of dental visits. People at different stages of behaviour change need support to identify any errors, encouragement and rewards for succeeding³².

Participation

Patients learn better if there is negotiation between them and the dental professional. People should be seen as active rather than as passive recipients of advice³³. Participation enhances mutual understanding, respect and learning. Patient and staff participation in the planning and execution of the program should increase the probability of success³⁴. Health education is often based on normative (professionally defined) need and concerned with disease prevention. Instead it should be based on the patient's felt needs³⁵.

The results of this dialogue are more likely to be fruitful if the participants understand one another's motives and behaviours. What are patients' motives for brushing their teeth? Toothbrushing can be either health-directed or health-related. Health-related behaviours are those behaviours which affect health but are not carried out for health reasons. Toothbrushing may be part of body hygiene, a washing, cleaning and grooming habit which is copied from parents and friends and significant persons³⁶. It is strongly influenced by social and psychological forces. Mouth feel, freshness, mouth smell and appearance are common reasons for brushing teeth⁴. Health-directed brushing to prevent or reduce gum disease is common³⁷. People brush their teeth for different reasons at different times of the day. Morning brushing can be health-related and evening brushing health-directed¹³.

“...dental professionals should acquire a sound knowledge of health education, communication techniques and theories of health behaviour.”

Early intervention

The earlier the involvement of the dental professional in the life of individuals, the more effective is the result. During an individual's life various influences and people shape the developing individual³⁸.

Reduction and anxiety

People learn more easily if they are not anxious. Patients are generally anxious when they visit a dental practice⁴⁰. Reducing anxiety is a prerequisite for meaningful communication, Jacob and Plamping³² have outlined methods of improving communication by reducing anxiety. Their suggestions include reducing barriers by not wearing white coats, keeping to time, smiling, using the patient's name, being sensitive, talking, giving information, being truthful, sharing control and watching for anxiety so that it can be addressed directly.

Making healthier choices the easier choices⁴¹

If a person has numerous other, more pressing, problems they will be less likely to attempt change because they may be already at the limits of their adaptability¹⁷.

Appropriate goals

Appropriate goals are those that relate to current behaviours and personally identified problems. Goals should be appropriate - A, realistic - R, measurable - M, positive - P, important to the patient - I, time related - T, specific - S (ARMPITS)⁴². For example, Croucher⁴⁹ has argued that tooth cleaning can be considered in its three components: structure, pattern and performance. Structure is the internal content of cleaning such as the type of paste or rinse and the type and size of brush or floss. Pattern is the frequency and location of the cleaning in daily routines. Performance is about the efficiency of cleaning as a result of structure and pattern.

Integration

Oral cleanliness education should be integrated with general health education about body cleanliness, grooming and self-esteem⁴³. As noted earlier, using messages which relate to more than one health problem, such as giving up smoking, will be useful.

Diverse educational approaches

An oral cleanliness education program must incorporate a number of diverse educational approaches⁴⁴ because individuals have different needs and are at differing stages of behaviour change. The educational methods should be cumulative and consistent. They should encourage patients to follow good examples and develop self-confidence by optimizing its importance and credibility of advice, and encouraging habit formation, long-term change and reinforcement^{7,45}.

Whilst there are structural, resource, professional, cultural and social barriers to improving dental health⁸, this review has concentrated upon professional and lay barriers and how to reduce them. This paper has argued that an analysis of the public's behaviour and beliefs about dental disease is required, to enable a move away from reliance on professional expertise towards more supportive approaches valuing lay competence⁴⁶. Such changes could require an alteration in provider-consumer relationships; reducing the social distance between provider and consumer with a shift from a situation in which the provider defines the needs of patients and the manner in which those needs are catered for, to one in which patients define their own needs and the manner in which they are met.

The dental professional should accept that change is a process, that people are at different states of readiness to act and may have other more pressing problems or concerns in their lives. As long as members of the dental team fail to heed this information about health behaviour, barriers to change and education they deprive themselves of the ability to develop more effective health promoting approaches.

References

1. Committee on Oral Health Care or the Prevention and Control of Periodontal Disease. In: *World Workshop in Periodontics*. S P Ramfjord, D A Kerr, M M Ash (eds). University of Michigan: Ann Arbor, 1966.
2. Corah N. The dental practitioner and preventive health behavior. *Hlth Educ Monogr*. 1974 2: 226-234.
3. Sheiham A. Prevention and control of periodontal disease. In: *International Conference on Research in the Biology of Periodontal Disease*. B Klavan, R Genco, H Loe, R Page, I Stern, J Thorpe, E.Barrington (eds), pp. 308-368. Chicago: College of Dentistry, University of Illinois, 1977.

4. Gift H C. Current utilization patterns of oral hygiene practices. In: *Dental Plaque Control Measures and Oral Hygiene Practices*. H L  e, D V Kleinman (eds), pp. 39-71. Oxford: IRL Press, 1986.
5. Frandsen A. Mechanical oral hygiene practises. In: *Dental Plaque Control Measures and Oral Hygiene Practices*. H L  e, D V Kleinman (eds), pp. 93-116. Oxford: IRL Press, 1986.
6. Young M A C. Dental health education: An overview of selected concepts and principles relevant to program planning. *International J Health Education* 1970 13:2-26.
7. Sogaard A J, Holst D. The effect of different school based dental health education programs in Norway. *Comm Dent Health* 1988 5: 169-184.
8. Gjermo P. In: *Promotion of Self Care in Oral Health*. pp 197-206. Oslo: Scandinavian Working Group for Preventive Dentistry, 1986.
9. Anderson R J. The changes in dental health of 12-year-old school children in two Somerset schools. A review after an interval of 15 years. *Br Dent J* 1981 150: 218-221.
10. Cutress T W et al. Adult dental health in New Zealand 1976-1982. Wellington: *Medical Research Council of New Zealand*, 1983.
11. Hugoson A, Koch G, Bergendal T, Hallonsten A-L, Laurell L, Lundgren D, Nymen J-E. Oral health in 1973 and 1983 in individuals aged 3-80 years in the community of Jonkoping, Sweden. In: A review of the findings on dental care habits and knowledge of oral health. *Swedish Dent J* 1986 10: 103-117.
12. Sheiham A, Smales F C, Cushing A M, Cowell C R. Changes in periodontal health in a cohort of British workers over a 14-year period. *Br Dent J* 1986 160: 125-127.
13. Croucher R. The Performance Gap: *Patients' Views About Dental Care and the Prevention of Periodontal Disease*. Research Report No. 23. London: Health Education Authority, 1989.
14. Honkola E, Freeman R. Oral hygiene behaviour and periodontal status in European adolescents: an overview. *Comm Dent Oral Epidemiol* 1988 16: 194-198.
15. Mandel I D. Calculus formation and prevention: an overview. *Compendium of Continuing Education in Dentistry*. Suppl. No. 8, S235-S241, 1987.
16. Cullen I. Urban social policy and the problems of family life: the use of an extended diary method to inform decision analysis. In: *The Sociology of the Family: New Directions for Britain*. C Harris (ed). pp 113-126. University of Keele: Sociological Review Monograph 28, 1979.
17. Hunt M S, Macleod M. Health and behavioural change: some lay perspectives. *Community Med* 1987 9: 68-76.
18. Finch H, Keegan J, Ward K, Sen B S. Barriers to the receipt of dental care. A qualitative research study. London: Social and Community Planning Research, 1988.
19. Croucher R. *Open Learning for Dental Health*. PhD Thesis. London: University of London, 1989.
20. Rayner J F. Communication between the public and the dental profession. *Am J Public Health* 1973 63: 21-32.
21. Rayner J F, Cohen L K. A position on school dental health education. *J Prev Dent* 1974 1: 11-23.
22. Frazier P J, A new look at dental health education in community programmes. *Dental Hygie* 1978 52: 176-179.
23. Tones K. Promoting health: the contribution of education. In: *Education for Health in Europe. A Report on a WHO Consultation on Co-ordinated Infrastructure within a Health Promotion Strategy*. pp 16-29. Edinburgh: Scottish Health Education Group, 1987.
24. Chu G C. Fear arousal, efficacy and imminency. *J Pers Soc Psychol* 1966 4: 517-524.
25. Tuckett D. Choices for health education: a sociological view. In: *Health Education: Perspectives and Choices*. D Sutherland (ed). pp 39-63. London: George Allen & Unwin, 1979.
26. Coulby W M, Hamilton M. Oral health knowledge and habits of senior elementary school students. *J Public Health Dent* 1991 51(4): 212-219.
27. Sheiham A. Promoting periodontal health — effective programmes of education and promotion. *Int Dent J* 1983 33: 182-187.
28. Prochaska J O. *Systems of Psychotherapy: A Transtheoretical Analysis*. Homewood, Illinois: Dorsey Press, 1979.
29. DiClemente C C, Prochaska J O. Self-change and therapy change of smoking behaviour: a comparison of processes of change in cessation and maintenance. *Addictive Behaviours* 1982 7: 133-142.
30. Prochaska J O, DiClemente C C. The transtheoretical approach. In: *Handbook of Eclectic Psychotherapy*. J C Norcross (ed). pp 163-200. New York: Brunner Mazel, 1986.
31. Conditte M M, Lichtenstein E. Self-efficacy and relapse in smoking cessation programs. *J Consulting Clin Psychol* 1981 49: 648-658.
32. Jacob M C, Plamping D. *The Practice of Primary Dental Care*. London: Wright, 1989.
33. Nettleton S. Understanding dental health beliefs: an introduction to ethnography. *Br Dent J* 1986 161: 145-147.
34. Stewart J, Jacobs-Schoen M, Padilla M R, Maeder L A, Wolfe G R, Hartz G W. The effect of a cognitive behavioral intervention on oral hygiene. *J Clin Periodontol* 1991 18: 219-222.
35. Bradshaw R. The concept of social need. In: *Welfare in Action*. H. Fitzgerald, P Halmos, J Muncie, D Zeldin (eds). pp 33-37. London: Routledge and Kegan Paul, 1977.
36. Rayner J F, Cohen L K. School dental health education. In: *Social Sciences and Dentistry*. N D Richards, L K Cohen (eds). pp 275-307. London: F  d  ration Dentaire Internationale, 1971.
37. Bateman P M. *Understanding and Predicting Toothbrushing Behaviour in Adolescents*. MSc Report. London: The London Hospital Medical College, 1986.
38. Frazier P J, Horowitz A. Oral health education and promotion in maternal and child health: a position paper. *J Public Health Dent* 1990 50(6): 390-395.
39. Kent G G, Blinkhorn A S. In: *The Psychology of Dental Care*, 2nd edn. pp 74-75. London: Wright, 1992.
40. Corah N L, O'Shea R M, Ayer W A. Dentists' management of patients' fears and anxiety. *J Am Dent Assoc* 1985 110: 734-736.
41. Milio N. *Promoting Health through Public Policy*. Philadelphia: F.A. Davis, 1983.
42. Myers G. Mnemonic proposed at workshop on Moving Toward Preventive Dentistry in the Royal Navy, 27-29 September 1987, Portsmouth.
43. Petersen P, Hadi R, Al-Zaabi F, Hussein J, Behbelani J, Skougaard M, Vigild M. Dental knowledge, attitudes and behaviour amongst Kuwaiti mothers and schoolteachers. *J Clin Paed Dent* 1990 14(3): 158-164.
44. Bourke L. The use of theatre in dental health education. *Aust Dent J* 1991 36(4): 310-311.
45. Bandura A. *Social Learning Theory*. New Jersey: Prentice-Hall Inc, 1977.
46. Kickbusch I. Trends in health education in Europe. *J Institute of Health Education* 1981 19:1-15.

DENTISTRY CANADA FUND/AURUM CERAMIC/CLASSIC \$1 MILLION CHALLENGE

A major fund raising initiative for the Dentistry Canada Fund will take place at nearly 20 golf tournaments from coast to coast. The skill of the golfers will be rewarded with a spectacular array of prizes ranging from gold coins, to trips, to \$1 Million and, at every step of the way, the Dentistry Canada Fund will also benefit (see prize list). None of this would be possible without the most generous support of our major sponsors: Aurum Ceramic/Classic, Midland Walwyn, Nobelpharma Canada Inc., and the Ch  teau Cartier Sheraton.

Space is Limited — registration is accepted on a first-come first-serve basis. Call our toll free Golf Hotline today: 1-800-661-1169.



Career Reflections by Canada's First Native Dental Hygienist

By:
Nina Burnham, Dip DH

In May 1962, I was hired by National Health and Welfare Canada, Medical Services Branch as a Dental Assistant. I was trained on the job and worked in this capacity for nine years. During this period I became interested in furthering my educational goals and with the assistance of the late Dr. N. Black of Dental Services, Ottawa I was able to pursue this objective.

In June 1971, I was invited for an interview and tour at the dental school of Base Borden Army Camp. Shortly after I was accepted in the Force's Dental Hygiene Program by the late Colonel Craigie. In September 1971, I began my studies.

The training proved to be excellent. There were five instructors for five students and I was quick to recognize the wonderful opportunity and experience my affiliation with the dental school permitted. Following my graduation from the dental hygiene program I returned to work at the Ohsweken dental office on the Six Nations Indian Reserve near Brantford, Ontario — my home territory. I was the first Native person in Canada to become a Dental Hygienist.

The Supervisor of Medical Services was Regional Dental Officer Dr. Don Linklater, now retired. He was a very conscientious, caring and supportive individual who considered prevention and treatment of dental disease a top priority. Under his direction, I traveled to all Indian Reserves in southern Ontario: Oneida, Muncey, Moraviantown, Kettle Point, Walpole Island, Sarnia, Saugeen, Cape Crocker, including Six Nations. I also provided services in Tyendenaga near Belleville, ON and Christian Island, north of Barrie. My duties also included trips to Moose Factory and Kaskatchewan in the James Bay Region.

I met with Band Councils, nurses, school teachers, principals and staff to introduce and explain the preventive dental health program. It was important to organize a good network with all levels, as it was the "first ever" preventive health care service offered to the people in these communities.

I developed a good rapport with my contacts and the program I delivered was initiated in all schools. Parents were requested to provide, in writing, signed prior approval for children's treatment.

Medical Services' provided portable equipment, consumable and non-consumable, that I transported around in a station wagon. The information and services I provided presented a new learning process



NINA BURNHAM, DIP DH

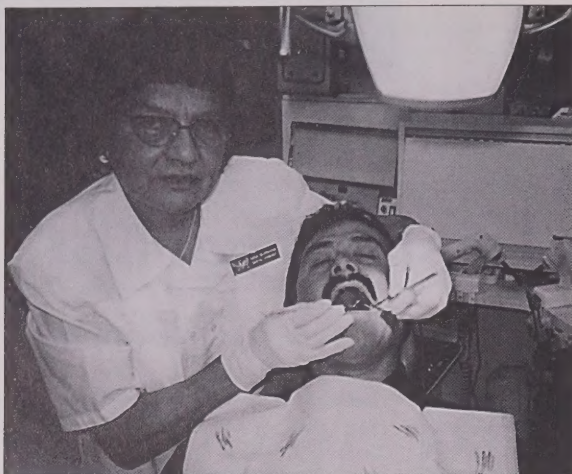
for all the children I worked with since most had never received dental treatment, and those who had, were generally 'emergency case' clients. Consequently they were scared, frightened and at times, uncooperative. (Some would even resort to staying home from school to avoid dental treatment!) After the initial examination and treatment, a report was sent to the parents and the Regional Dental Officer, advising both of the necessary treatment required.

I contacted and visited dental offices in local areas and arranged meetings with dentists to encourage them to see our patients and provide restorative treatment. On occasion, Dr. Linklater joined me in these meetings. (His home office was located in Sudbury, ON.)

Some dentists organized their treatment schedules in order to work certain days right in the schools to provide restorative treatment. All portable equipment and supplies were provided by Medical Services. I assisted the dentists who participated in these programs, as the children knew me and my presence often helped them to be more at ease. Work schedules were provided to principals and appropriate staff so that our presence was the least disruptive as possible.

The information I shared offered a valuable learning process for most parents as well as children. Many parents did not realize the importance of good oral hygiene and proper diet. They began to understand better how a sugary diet, i.e. pop, gum, freshie, chocolate and candies caused numerous caries and loss of teeth. Films demonstrating the importance of good oral hygiene were shown to parents at community meetings. Toothbrushes and paste were provided for children in the junior grades and toothbrushes were available for those in the senior grades.

On November 2, 1981 the new Medical facilities "Gane Yohs" (pronounced GANnay Yowz) was officially opened in Six Nations. (Gane Yohs is a Mohawk term meaning 'the healing place'.) It currently houses a pharmacy, a laboratory, and four medical operatories staffed by: rotating medical doctors, two registered nurses, three public health nurses, three community health workers, OHIP staff, a medical receptionist and the Executive Director. The dental department consists of two full-time dentists, two dental assistants, one dental hygienist and a dental receptionist. The opening of this centre meant I was no longer required to do the field work and travel I had previously undertaken.



The Six Nations Indian Reserve covers an area that is roughly 10 square miles. Its population is comprised of approximately 8,000 residents who are members of seven different tribes: Mohawk, Cayuga, Seneca, Onondaga, Oneida, Tuscarora and Delaware. There are approximately 1,100 elementary students from pre-kindergarten to Grade 8. In addition, there are about 80 children in Day Care, 50 residents in Iroquois Lodge Nursing Home and 600 students enrolled in secondary school. These figures may provide you with a better understanding of the dental treatment required by Six Nations.



- LEGEND:**
1. Moose Factory
 2. Tyendenaga
 3. New Credit
 4. Six Nations
 5. Muncey & Oneida
 6. Moraviantown
 7. Walpole Island
 8. Sarnia Reserve
 9. Kettle Point
 10. Saugeen
 11. Cape Crocker

Indian Reserves which Nina visited while working for Medical Services.

Nina Burnahm sat on the Six Nations Band Council for 14 years (1972-1986). The reserve's Band Council consists of 12 elected members (two from each of the six districts), and one chief. The chief is voted in by voting members of the reserve. On September 30, 1995 Nina Burnham officially retired as the first Native dental hygienist in Canada.

**Do your
clients
understand
what you tell
them?**

Health professionals who give clear instructions are more effective communicators.

To make what you say easy to remember:

- Decide on the 3-5 most important points for the visit and stick to them.
- Use common words, not technical jargon. Check that your client understood what you said.
- Acknowledge if your client is in pain, uncomfortable or having strong feelings.
- Use simple written information as a back-up.
- Plan with your clients what they can do.

**Simple instructions are a step
towards good health care.**



Canadian Public
Health Association

**National Literacy
& Health Program**

Funded by the National Literacy Secretariat

These techniques are adapted from the video, Face to Face, with the permission of the Acadia Health Education Coalition, Maine, USA.

PerioREPORTS

Bimonthly publication which summarizes periodontal research of specific interest to clinicians. Easy to read format keeps you up to date on the latest research findings. Journals reviewed for **Perio REPORTS** include:

Journal of Periodontology
Journal of Clinical Periodontology
Journal of Periodontal Research
Journal of Dental Research
Periodontal Abstracts
Quintessence International
J of Periodontics and Restorative Dent
JADA, JADHA
and many more

☐ Please send sample issue for my review

☐ \$48 one-year
☐ \$84 two-year

Name

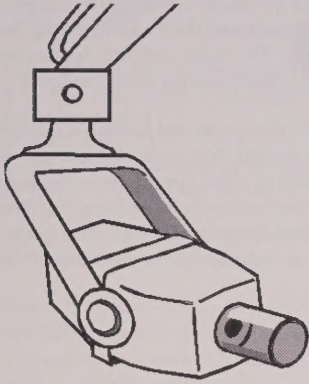
Address

City

Prov Postal Code

Mail to: Perio REPORTS
Box 52090, 311 - 16th Ave. NE
Calgary, Alberta, T2E 8K9

Radiography



1. Reducing the milliamperage of dental x-ray machines:
 - a) affects the density of the radiograph
 - b) indicates an increase in exposure time
 - c) affects the quality of radiation produced
 - d) affects the quantity of radiation produced
2. The only principle of shadow casting which is not satisfied by the long cone paralleling technique is:
 - a) the film should be parallel to the long axis of the tooth
 - b) the source of radiation should be as small as possible
 - c) the central ray should be perpendicular to the film and the tooth
 - d) the distance between the tooth and the film should be as small as possible
 - e) the distance between the target (the source of radiation) and the film should be as great as possible
3. The greatest amount of scatter radiation emitted in the dental operatory originates from
 - a) facial tissues
 - b) the x-ray tube
 - c) the walls of the operatory
 - d) the position indicating device
4. The body tissue most sensitive to x-radiation
 - a) blood
 - b) bone
 - c) muscle
 - d) skin
5. The effects of x-radiation on human tissues is harmful because it is:
 - a) cumulative
 - b) momentary
 - c) permanent
 - d) temporary
6. The chief source of radiation exposure to the operator is:
 - a) hard radiation
 - b) primary radiation
 - c) image forming radiation
 - d) secondary or scatter radiation
7. A lack of definition on a radiograph is caused by:
 - a) decreased MA
 - b) increased KVP
 - c) patient movement
 - d) increased exposure time
8. The latent image refers to:
 - a) unrecorded image
 - b) visible image after processing
 - c) invisible image after processing
 - d) invisible image before processing
9. In using the bisecting angle technique you position the P.I.D. with too much vertical angulation (+) the result will be:
 - a) cone cut
 - b) elongation
 - c) foreshortening
 - d) overlap
10. If the temperature of processing solutions is slightly above normal, radiographs of desired density may be best obtained by:
 - a) increasing fixing time
 - b) decreasing fixing time
 - c) increasing developing time
 - d) decreasing developing time
11. The purpose of filtering the primary x-ray beam is to:
 - a) strain out electrons
 - b) reduce beam diameter
 - c) reduce scatter radiation
 - d) remove low energy photons
 - e) remove hard penetrating x-rays
12. Several of the following items cause film fog in developed radiographs; they are:
 - a) underexposure
 - b) scattered radiation
 - c) improper safelighting
 - d) light leak in darkroom
 - e) processing solutions are too cool
13. The speed at which electrons move across an x-ray tube is regulated by:
 - a) MA
 - b) KVP
 - c) both a) and b) above
 - d) neither a) or b) above
14. Using an "E" speed film rather than a "D" speed film to produce a radiograph requires:
 - a) a longer exposure time
 - b) a shorter exposure time
 - c) the same exposure time
 - d) a longer processing time
 - e) a shorter processing time
15. Approximately what percent of energy released in the x-ray tube is released as x-rays?
 - a) 1%
 - b) 10%
 - c) 25%
 - d) 75%
 - e) 99%
16. The remainder of the energy produced is released as:
 - a) chemical energy
 - b) electrical energy
 - c) heat energy
 - d) mechanical energy

Answers:

1. d)	2. d)	3. a)	4. a)	5. c)	6. d)	7. c)	8. d)	9. c)	10. d)	11. d)	12. c)	13. e)	14. b)	15. b)	16. c)
-------	-------	-------	-------	-------	-------	-------	-------	-------	--------	--------	--------	--------	--------	--------	--------

This self-assessment test was prepared by MWO Claude Bujold, RDH. MWO Bujold is an instructor and assistant director of the Dental Hygiene Program, Canadian Forces Dental Services School, Canadian Forces Base Borden in Borden, ON.

prepared by:
Carol Barr Overholt, Dip DH

Article: *Parents in the Operatory*

Authors: Margaret A. Certo, DDS, Joseph E. Bernat, DDS, MS
Journal: *New York State Dental Journal*, February 1995

Early articles, circa 1898, regarded parents being present in the operatory as inappropriate. A 1958 study indicated that the presence or absence of parents in the operatory was not a contributing factor affecting the client's response to treatment. In 1962 a study supported that poor client behaviour in pre-schoolers was most evident when the children were separated from their mothers. Other researchers focusing on the relationship of mother and child cited that as a mother's anxiety increased, so did the child's and negative behaviour ensued.

In 1983, one survey suggested that 75 percent of responding dentists excluded parents from the operatory during treatment of children. The reason given was that parents were an impediment to client management. Both dental schools and postdoctoral diploma programs have supported declining parents access to the operatory.

Traditionally, the reasons for excluding parents included, that parents distract and interfere with the client-practitioner rapport, that parental anxiety negatively aggravates the behavioural management problems, that parental presence may make the operator uncomfortable and subsequently limit treatment/management techniques. Supporters of parental presence during paediatric dental treatment base their position on the following, separation of a child from a parent increases anxiety and contributes to the stress of the appointment, parents who are anxious about their children can have their fears calmed by observing and participating in the dental experience and this relaxation is conveyed to the child client, parental presence allows the opportunity to observe the child's actual behaviour and immediately select mutually satisfactory management techniques.

Psychological journals, meanwhile, were publishing articles supporting parental presence as both positive and useful. Researchers found that the children felt more secure and that this promoted the development of coping behaviour. A question arose, was the child's separation anxiety the cause of the undesirable behaviour? Numerous studies were conducted to examine this question. Some found little difference in the behavioural responses between clients separated from their parents and those whose parents accompanied them during treatment.

For nearly 20 years the Association for the Care of Children's Health (ACCH) has advocated the presence of parents during health care procedures. In the practice of children's medicine, excluding traumatic or surgical procedures, parents are seldom barred.

A 1989 study indicated that 60 percent of surveyed paediatric dentists included parents during the initial examination but only 34% permitted parents during treatment appointments.

Parental attitudes are also considered. A 1992 pilot study indicated that 75 percent of parents, when asked whether they would like to join their children during treatment, wished to be present in the operatory. Situations that parents particularly wished to be present for were sedation, restraint, and when their child was crying. Ninety percent of

this parental group indicated that they would leave the operatory if requested, but 27 percent would be "upset". Further, 97 percent reported that they routinely accompanied their children into the operatory of the paediatrician's office. The study concluded that parents wish to be with their children when possible, during dental treatment.

Societal changes are discussed in the paper and increased societal violence is blamed for parents feeling that their children are at increased risk, and therefore a need to protect them. Also, often both parents work and therefore wish to be included in all of their children's experiences. The concept of parents as consumers expecting quality assurance, and that litigation is a real concern for practitioners, is also examined.

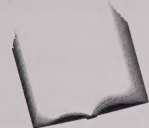
The authors strongly suggest that practitioners develop a protocol for including parents in the dental treatment process more frequently. They believe that this can help to build stronger and more trusting relationships with families. Suggested guidelines, for including parents in the dental treatment procedures of their children, are included in the article.

Article: *Staying Excited About Dentistry*

Author: Gordon J. Christensen, DDS, MSD, PhD
Journal: *JADA*, Vol. 125, December 1994

This article compares dental care providers that maintain an excitement and enthusiasm for their profession with those who have lost the passion for dentistry and community service. The paper outlines some practical suggestions for infusing some excitement into the dental health care provider whose enthusiasm may be flagging.

1. Continuing education is a must. Dr. Christensen supports that in-depth, hands-on continuing education is one of the most important ways to maintain excitement and increase clinical and didactic knowledge. He states "you cannot spend money on anything better".
2. Work with people who are positive and enthusiastic about what they do. Negativity drags you down. Work in an environment that supports and enlivens your philosophy of dental care.
3. Do what you enjoy. Choose the work setting that allows you to provide the kind of service that you know you value.
4. Incorporate new ideas into your delivery of care that interest or excite you. The author incorporates one new technique per year and devotes time to developing this new skill.
5. Change your operatory/office decor in some way every five years. Just as home redecoration provides a lift, a change to your work-setting can provide a boost.
6. Take some time off. Recreation time is important for relaxation and allows the clinician to renew energies. Develop hobbies and build time into each day to do something you enjoy.



CDA Workbook on Infection Control: A Companion to the CDA Guidelines on Infection Control

Dr. Trey L. Petty

Committee on Community & Institutional Dentistry, Canadian Dental Association
9 August 1994

50 pages — Call CDA at (613) 523-1770 to order, CDA members no charge, \$10 for non-members

Review by: Dianne Landry, Dip DH, Dip DN, BA, BV/TEd

The Canadian Dental Association (CDA) has published a workbook-style manual to act as a companion document to the CDA's Recommendations for Infection Control Procedures.

The book is presented in a loose-leaf form. This allows pages to be easily copied, or additional information to be inserted as it becomes available. The author describes the workbook as a "how to", whereas the Recommendations should be viewed as the "why". The workbook does not attempt to justify the scientific or philosophical issues surrounding infection control, but rather, it directs the dental office staff through various actions and decisions necessary to establish infection control protocol that meets all the Recommendations for Infection Control Procedures of the Canadian Dental Association.

The book is well organized, beginning with an introduction on how it should be used, followed by a description of each element of infection control, steps to achieve these, and ending with a waste management flow chart.

It is recommended that one staff member complete the task listings for each topic outlined. For example, there are checklists to verify present office procedures for personal protection, staff injury, instrument sterilization and disinfecting techniques, operatory and laboratory hygiene, and waste management. A dental hygienist would be an ideal person in the practice to initiate or oversee the completion of the document.

Upon completion of all the questions and inclusion of instruction sheets and/or product references, the workbook becomes an office policy manual and a practical teaching guide for present and future staff.

The workbook is a living document and it is recommended that it be updated a minimum of once every six months. New information about changes in name brand, type of solutions, material or pieces

of equipment used should be added, and a procedure for notifying the rest of the staff instituted.

The most valuable aspect of this workbook is that the very act of completing the checklists, forces the employee to document the actual materials and procedures used for infection control in that office. It is a way of checking that all the staff are indeed following universal precautions in their every day routines.

This action will also point out those areas where the procedures and materials used are less than adequate. Steps can then be taken to correct the inadequacies and deficiencies.

This workbook is a must for every dental practice.



Risk Markers for Oral Diseases Volume 3

Periodontal Diseases

Markers of Disease Susceptibility and Activity

Edited by: N.W. Johnson

Cambridge University Press 1991

40 Allost 20th Street, New York, NY

10 011-4211 USA indexed, 67 illustrations, 464 pages

Reviewed by

Master Warrant Officer Claude Bujold, RDH

Instructor, Dental Hygiene Program

Canadian Forces Dental Services School, CFB Borden

The search to fully understand the complex nature of periodontal disease (PD) is an ongoing process. Years of research by dedicated individuals had provided us with a wealth of scientific data on the subject, yet, some aspects of PD remain unknown. One aspect of PD which eludes us is the availability of a diagnostic test which would predict susceptibility, accurately indicate disease activity, and is clinically practical and cost-effective. The search for such a diagnostic tool is the focus of this book.

This volume, as well as Volume I on dental caries and Volume II on oral cancer are the result of three symposia hosted by the Royal Society of Medicine's Odontology Section in 1988/89 in London, England.

The contents, which reflect the works of many prominent scientists and researchers, were compiled and edited by N.W. Johnson, himself a researcher and a Professor of Dental Sciences.

The book is divided into three parts. Main headings are well indicated in bold letters. Figures

and tables complement the text and support many findings of various studies.

Part 1 of this text reviews epidemiological data on the distribution of PD in industrialized and non-industrialized countries. The prevalence of severe forms of periodontitis are also discussed here.

The studies from which this data are extrapolated, are analyzed as to their validity and the effectiveness of the methods and indices used.

Part 2 encompasses the main thrust of this volume, which is, the search for methods that will help to characterize high risk PD groups and individuals, and the search for markers of susceptibility and activity of the various forms of PD.

All aspects and entities involved in PD are scrutinized for their feasibility to either predict group and individual susceptibility to PD or their potential to indicate active disease. For example, risk factors such as age, sex, race and systemic disease are discussed. Oral fluids such as saliva, gingival crevicular fluids and connective tissue breakdown products, are thoroughly examined in an effort to identify their potential to indicate either disease activity or susceptibility indicators.

As in Part 1, the material here is derived from numerous research papers and studies.

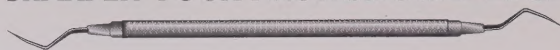
Part 3, entitled Practical Applications and Implications, evaluates microbiologically-based testing for acceptability, cost, simplicity, sensitivity, specificity and accuracy. Public Health implications of diagnostic methods are also discussed in this section.

The studies which are quoted in this book are well referenced at the end of each chapter as well as in the body of the text.

The search for relevant, practical diagnostic tools for PD is indeed a topic of interest to the dental profession as a whole. The impact of past, present and future research in periodontology is relevant to us all as well. This book provides the reader with an overview of the present direction of periodontal research and illustrates how it could influence the criteria we may use to diagnose and treat PD in the future.

The volume of statistical data and the general subject matter dictates that this book would be assimilated more easily in small increments. The structure and distribution of chapters permit this type of reading.

This is probably not a volume that would generate a wide general interest, but it is well suited for those with a penchant for scientific research. It would also serve well as an excellent reference manual.



"A Question of Conscience — A Matter of Choice"

By:
Scott Rhude

This is an ethical dilemma written by Scott Rhude, a second year dental hygiene student, at Dalhousie University. As part of the Ethics course, students are asked to interview a practicing dentist or dental

hygienist regarding an ethical dilemma that they have encountered in practice. The students then analyze the dilemma using a decision making model.

Background

About two weeks ago, while visiting my hometown, I happened to bump into my past family dental hygienist. I had not spoken to her for several years and she had heard from my mother that I was studying Dental Hygiene at Dalhousie University. A graduate from Dalhousie herself, she was interested in finding out about my experiences in "the ol' Clinic" and how I was getting along, so she invited me to join her for a cup of coffee.

Not long into the conversation I mentioned that I had this paper for my Ethics class due in a couple of weeks. I asked her if she had any ethical dilemmas she could share with me. She agreed to help me as long as I did not disclose her identity or the office where she was employed. I assured her I would not, all the while thinking to myself that this individual was going to have some horror story for me...I was wrong! It turned out to be your average, textbook-style ethical dilemma — nothing fancy just tough to solve.

The Dilemma

According to Katelyn (as I will refer to my hygienist), the dentist she works for is in the habit of skipping out of the office to run what he calls "short errands" whenever he has free time, leaving her unattended while she has a client in the chair. The problem is that most of the time these "short errands" run between 15-30 minutes! On the one hand, she enjoys the autonomy (it's nice to know that he feels I'm competent enough to continue alone; most dentists think that our knowledge and skill is conditional upon their presence...) but she is nervous about the implications if the Registrar from the provincial dental board or someone with such authority decided to spot-check the practice (I mean I know darn well what he [the dentist] could claim?...I told her she was to take her lunchbreak or something while I was out... then I'm the culprit!). So the dilemma is becoming clearer.

Katelyn confides, "I feel that I am more than competent to continue treating the client while he's out; I mean you don't see me stop scaling or polishing when he leaves the room, but that is not the issue. The issue is whether or not I want to continue treating clients and teaching them oral hygiene when he is not in the building! Because even if I don't lose my licence, he will lose his and there are not exactly tons of hygienist's jobs around these days. And let's just suppose an emergency situation developed and I needed the Doctor while he was out on an errand. What kind of situation am I left with then?"

Katelyn understands the limitations of her scope of practice and is anxious about the dentist's lack of respect for this. She admits that half the reason she has said nothing in the past is for fear of losing more than his respect; she feels that voicing her concerns to him will be like confessing incompetence.

I probed further to determine exactly how she responds when the dentist pops in and explains that he will be going on one of these "short errands". She said, "Well exactly, I have the client sitting there, putting their trust in me as a professional, what am I supposed to say? 'Excuse me, I need you here in case I mess up or don't know what to do next!!!' I enjoy the status that comes with being a health care professional — my clients respect me and recognize the knowledge I can effectively share with them. If I were to respond to him in that way I would discredit myself!". She has a very good point and I was soon beginning to understand the severity of the dilemma she was facing. From what I could gather, Katelyn has never discussed the matter with her employer.

Analysis of Dilemma

The following represents an analysis of Katelyn's dilemma using the Ethical Decision Making Model:

A. Gather Facts

- Those involved include: Dentist, Katelyn, Clients, and Provincial Dental Board.
- According to law dental hygienists in Nova Scotia must perform their scope of practice while under the supervision of a licensed dentist.

- Katelyn's employer frequently leaves the office while she is rendering dental hygiene care to a client.
- The only other staff in the office during these episodes are the receptionist and a dental assistant.
- The dentist characterizes these absences as "short errands" but they have lasted for up to 30 minutes according to Katelyn.
- Katelyn fears the possible repercussions of the Provincial Dental Board of Nova Scotia if she is caught practising unsupervised while her employer is out.

- Katelyn feels competent but also recognizes the potential hazard that the dentist places his clients in if ever an emergency arises during his absences.
- Katelyn has not confronted the dentist with the issue.

B. Identify Ethical Principles/Values Involved

Section I: Responsibilities to the Client.

"The dental hygienist has a commitment to the welfare of clients in all practice settings..."

Section I Principle 3: Veracity and Informed Consent.

"Veracity is the ethical principle of honesty..."

Section I, Principle 4: Beneficence and Quality Assurance.

Standards 4(b) and 4 (c). "The scope of a dental hygienist's responsibility should be based on education, and experience, as well as legal considerations of licensure and registration" and "Dental hygienists accepting professional employment must determine if the conditions will permit provision of care consistent with the Practice Standards for Canadian Dental Hygienists, and the values and standards of the Code of Ethics for Dental Hygienists."

Section I, Principle 5: Justice.

Standard 5(b). "The first consideration of the dental hygienist who suspects incompetence or unethical conduct by members of the dental profession should be the welfare of present clients and/or potential harm to future clients."

Although the dilemma does not arise out of direct conflict between two or more of these ethical principles it does involve them. The conflict is between Katelyn's desire to preserve her status as a professional in the eyes of both her employer and her clients, and her moral conscience telling her that it is illegal and possibly even dangerous for her to be practising while unsupervised. To complicate matters I detected a keen sense of self-preservation in her plight; she is well aware that she may lose her job or worse, her licence to practise dental hygiene, if she reports the case. Is she genuinely concerned about the welfare of the client or simply her employment security in an area where very few opportunities exist? I do not cast this shadow of doubt on the case because I find Katelyn's motives suspicious. In fact, her self-confidence with her expertise has already been documented and so she feels the risk to her client is minimal and not the major issue. I think she is concerned about both.

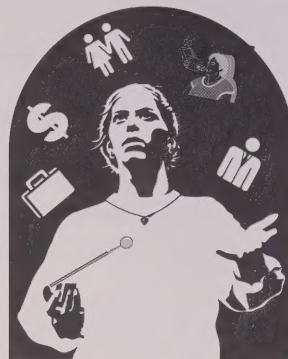
C. List Options

All four of the cited Principles above obligate Katelyn to take some sort of action as opposed to simply doing nothing and allowing the dentist to continue his "errands" at his convenience. The 3rd one, Veracity and Informed Consent, was included because I believed this obligates her to at least inform the clients of the situation the dentist was placing them in. It could be argued, however, that honesty does not necessarily imply disclosure therefore Katelyn does not have to reveal the potential risk involved unless directly questioned by the client.

Her options are as follows:

- 1) To not confront the dentist and continue to practice unsupervised when these incidents occur without informing the client.

- 2) To not confront the dentist but explain the situation to the client and allow them to decide (i.e., to be treated or not to be treated).
- 3) Report the dentist's actions to the Provincial Dental Board and allow them to handle it.
- 4) In confidence, confront the dentist and explain her concerns to him, asking him to not leave the office while she is treating a client so that neither he, the clients or she are placed in jeopardy. (This option is to be followed by #3 in the event that the matter is not satisfactorily resolved.)



D. Choose Best Ethical Option

While at the time of this interview Katelyn had not yet chosen a course of action, I strongly urged her to talk to her employer openly, explaining how his conduct places her in a dilemma. I told her what I learned about assertiveness and recommended she try some on this dentist — not aggression, just assertiveness! She agreed with me saying, "I know what I should do... but sometimes there's a big gap between should and will." I sense that she feels somewhat intimidated by this man and, if so, this together with her gentle nature may not be very conducive to assertiveness.

In any event the best option in terms of ethics and morality is unquestionably #4. It complies with the standard of fairness to all involved: the dentist is given an opportunity to defend, respond and/or rectify his behaviour, the clients are protected from potential harm and neither Katelyn's job nor ethical commitment is jeopardized. Above all, option #4 will allow her to maintain her professional relationship with the dentist without "jumping the gun" and appearing hostile. Clearly something must be done and by consulting the dentist, getting his perspective and discussing a solution together, she can come across as purely concerned for everyone involved, not simply self interest.

Conclusion

The previous discussion only analyzed the dilemma from Katelyn's point of view using the CDHA Code of Ethics. This was done in part because the person interviewed was a dental hygienist but also because I am interested in becoming more fluent in the hygiene Code for obvious reasons. From the dentist's point of view there is little grounds for calling the issue a dilemma while in fact it is a blatant violation of both the dentists' Code of Ethics and the Dental Hygiene Regulations pursuant to the Dental Act. Come to think of it, Katelyn, by electing to do nothing up until that point when I interviewed her, was also in direct violation of the two! A real live criminal.....hmmmm?

		SPONSOR	LOCATION	FOR INFO CALL
May				
25	An Up-to-Date Overview of Ceramic Brackets — Dr. J. Kalbfleisch	Ontario Dental Hygiene Orthodontic Study Club	Mississauga, ON	Merril at (905) 821-3363
27	The Paper Chase — Jenny Thomas, RDH	Durham-ODHA Seminar	Oshawa, ON	1-905-681-8883
June				
3-9	Orthodontic Module for Dental Hygienists	University of British Columbia	Vancouver, BC	(604) 822-2627
5-9	A Refresher Program in Dental Hygiene — Laura MacDonald, Dip DH, BCsDent, MEd	School of Dental Hygiene, University of Manitoba	Winnipeg, MB	(204) 789-3540 or (204) 789-3331
9	Soft Tissue and Bone Pathology for Dental Hygienists	University of Washington	Washington	(206) 543-5448
9 & 10	American Dental Hygienists Association's 72nd Annual Session	American Dental Hygienists Association	Chicago, IL (Sheraton Chicago Hotel & Towers)	(312) 440-7649
9-11	Restorative Dental Hygiene Refresher (mannequin) Program	George Brown College	Toronto, ON	Debbie Daniels at (416) 944-4555
13	Brenda Walker, Executive Director, ADHA	Northern Alberta Dental Hygienists Society	Edmonton, AB (Westin)	Rae at (403) 481-7975
16	Implant Maintenance: Clinical Course — Karima Bapoo-Mohamed, Dip DH	Vassos Implant Learning Centre	Edmonton, AB	(403) 488-1240
16-18	American Conference on the Dental Management of HIV Disease "Responding to the Challenge"	American Dental Association and the University of the Pacific School of Dentistry	Chicago, IL (Fairmont Hotel)	Marcia Greenberg at 1-800-621-8099 ext 2535
17	What's New for Today's Practice — Eric Freeman on Periodontics	University of Manitoba Continuing Dental Education	Minaki, ON (Minaki Resort International)	(204) 789-3331
23-25	CDHA 6th Annual Professional Conference: The Public, The Practitioner, The Profession	Canadian Dental Hygienists Association	Halifax, NS (Sheraton Halifax)	1-800-267-5235
July				
3-14	Dental Hygiene Refresher Course	George Brown College	Toronto, ON	Petula Widyaratne at (416) 944-4543
10-14	Dental Education In Care of the Disabled	University of Washington	Washington	(206) 543-5448
23-27	Dental Hygiene Clinical Registration Examination Preparation Course	Algonquin College	Ottawa, ON	Cathy Thom at (613) 727-4723 ext. 7054
August				
26-29	CDA Annual Meeting	Canadian Dental Association	Ottawa, ON	(613) 523-1770

CDHA's Book of the Month Suggestions

May

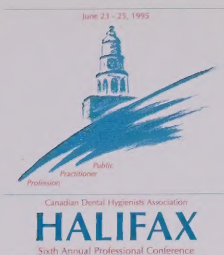
**Doctors Talking with Patients/Patients Talking with Doctors:
Improving Communication In Medical Visits**
— Debra L. Roter & Judith A. Hall
ISBN 0-86569-048-0
1992, Greenwood Publishing Group, Inc.



June

Teaching Patients With Low Literacy Skills
— Cecilia Conrath Doak
ISBN 0-397-54498-7
1985, J. Lippincott Co.





CDHA's 6th Annual Professional Conference

Your opportunity to network with colleagues from across the country and get a better understanding of Canada's dental hygiene profession from a national perspective...

if you haven't registered call 1-800-267-5235 and REGISTER BY PHONE NOW!

Preliminary Program

Most sessions will only be delivered in English, however those **highlighted** will be simultaneously translated

Friday, June 23

- 1:00 - 1:30 Conference Opening
Opening Remarks/Greetings
- 1:30 - 3:15 **Jane Fulton, PhD**
Now is Not the Time to Leap on Your Horse and Ride Off In All Directions!
- 3:15 - 3:30 Break
- 3:30 - 5:00 **1 of 3 choices!**
Choong Foong, BSc (Hon) PhD on Medical Histories & Pharmacology
or
JoAnn Gurenlilian, RDH, PhD on Lasers
or
Chris Gallant, MSc, MD, FRCP(C) on Dental Hygiene Dermatology Issues
- Evening: President's Reception

Saturday, June 24

- 7:30 - 8:30 Continental Breakfast (tentative)
- 8:30 - 10:00 **1 of 2 choices**
Barbara Harsanyi, BA, DDS, MS FRCD(C) on Oral Pathology
or
JoAnn Gurenlilian, RDH, PhD on Diagnostic Decision-Making
- 10:00 - 11:30 Free Paper Presentations and Commercial Exhibits
- 11:30 - 2:00 Lunch

2:00 - 3:45

Panel Discussion on Self-Regulation featuring: Brenda Walker, RDH of the Alberta Dental Hygienists Assn
Pat Grant, Dip DH, BA
Bob Konopasky, PhD, C.Psych.
Marilyn MacKay-Lyons, MSc (PT), BSc (PT), Dip (PT)
moderated by Lynda McKeown Mickelson, RDH, HBA of the College of Dental Hygienists of Ontario

or
Michael Vallis, MA, PhD on Stress Management

3:45 - 4:00

4:00 - 5:00

2 choices

Burglind Gregg, Dip DH, BA, LLB on the Legalities of Recordkeeping
or
Kimberly Krust-Bray, RDH, MS on The Role of Local Drug Delivery and the Changing Role of Ultrasonics

Sponsored by: **DENSPLY CANADA**

Evening

Social Event (including a Meal and Entertainment (More details to follow in future issues of *Probe*))

Sunday, June 25

- 7:30 - 8:30 Continental Breakfast
- 8:30 - 10:00 **Dan Boland, MSc (PT), MCPA and Shirley McCarthy, BSc (OT), Reg (NS) on Preventing & Managing Injuries in the Workplace**
and
Christine Robb, Dip DH, BA on Ethics and Infection Control
or
Kimberly Krust Bray, RDH, MS on Periodontal Debridement
- Sponsored by: **DENSPLY CANADA**
- 12:00 - 2:00 Awards Lunch

Free Paper Presentations — Saturday, June 24

- **Oral Health Knowledge, Attitudes and Behaviors of Grade Six Students**
Sandra Cobban, Dip DH
(Sturgeon Health Unit) St. Albert, AB
- **"What Do People Want from Dentistry?" An Action Research Approach**
Barbara Drewry, Dip DH and Rita Chu, Dip DH
(Bachelor of Dental Science candidates, UBC) Sidney, BC
- **Manuscript Preparation for Submission to PROBE**
Marilyn Goulding, Dip DH, BSc, (MSc Candidate New York University)
(Sponsored by CDHA on behalf of Probe's Editorial Board) Fort Erie, ON
- **Dental Hygiene Self-Regulation: An Educational Perspective**
Cyndy Grant and Scott Rhude
(Students of Dalhousie University's Dental Hygiene Program) Halifax, NS
- **Questionnaire Survey of Musculoskeletal Problems Among Dental Hygienists in Ontario**
Evie Jesin, Dip DH, BSc
(George Brown College) Downsview, ON
- **Power Shift in Health Care: Dental Hygiene Emerges**
Lynda McKeown Mickelson, Dip DH, HBA
(Lakehead University) Thunder Bay, ON
- **Barriers Faced By Immigrants When Seeking Oral Health Care**
Mickey Wener, BS, Dip DH, MED
(University of Manitoba, School of Dental Hygiene) Winnipeg, MB

POSTER PRESENTATIONS/TABLE CLINICS

Poster Presentation

- **Dental Health Services for People with Mental Handicaps**
Vicki Thompson, Dip DH and Maxine Borowko, Dip DH, Dip DT, Cert V/T Ed
(British Columbia Ministry of Health) Abbotsford, BC

Table Clinics

- **Carpal Tunnel Syndrome: Occupational Hazard**
Julie Dart and Cheryl Jacquard
(Dalhousie University School of Dental Hygiene Student Table Clinic Competition Winners) Halifax, NS
- **Infection Control and the Importance of Protective Eye Wear**
Steve Cameron
(Dalhousie University School of Dental Hygiene) Halifax, NS

NEW THIS YEAR,
AN INFORMATION EXCHANGE
FORUM FOR THOSE WITH
COMMERCIAL INTERESTS:

Market Exchange Forum • Saturday, June 24
Getting Busier Despite Less Dental Insurance
Doug Houden of Knowell Therapeutics

Support Our Exhibitors!

Be sure to take time to visit the Commercial Table Display on Saturday, June 24 from 10 am - 2 pm

Alphabetical Listing of Commercial Table Displays

Ash Temple
Bausch & Lomb Canada Inc.
Block Drug Company (Canada) Ltd.
Dairy Farmers of Canada
Dentsply Canada Ltd.
Henry Schein, Canada
Hoechst-Roussel Canada Inc.
John O. Butler
Knowell Therapeutic Technologies Inc.

Nobelpharma Canada Inc.
Oral-B Laboratories
Patterson Dental (Dentaire) Canada Inc.
Premier/Espe Canada
Procter & Gamble
Septodont Inc./Novocol Pharmaceutical
SmithKline Beecham
Teledyne Waterpik

*CDHA extends sincere thanks to the following organizations/companies
for supporting its 6th Annual Professional Conference*

Aurum Ceramic/Classic
Dentsply (Ash) Hygiene Division
Knowell Therapeutic Technologies Inc.
Septodont Inc./Novocol Pharmaceutical
Pro-Dent Laboratories
Patterson Dental (Dentaire) Canada Inc.
Teledyne Waterpik

*On behalf of the CDHA Board,
sincere thanks to the members of the
1995 Local Organizing Committee for their time and effort over the past year:*

Local Chair	Terry Mitchell
Scientific Co-chairs	Kate MacDonald Glenda Butt
Exhibits/Sponsorship	Joan Degan
Registration	Judith Orr
Local Fundraising	Maribel Reyes Beth Bleasdale
Social Chair	Pat Grant
Hospitality	Alison MacDougall
Reunions	Kim Haslam

MARK YOUR CALENDAR

NOW

AND PLAN TO ATTEND

CDHA's

7th ANNUAL

PROFESSIONAL CONFERENCE

CDHA 7th Annual Professional Conference

Calgary, AB

June 8-10, 1996

*"Interdependence and Independence:
Striking A Balance"*



Read PROBE for details!

Immediate Dental Implants

By: *Leanne D. Carlson-Mann, Dip DT, Dip DH*

History

A 60-year old man presents with severe pathological involvement of both maxillary central incisors. Tooth #11 was fractured beneath

the gingiva and tooth #21, with a permanent crown, had an endodontic failure. The client was concerned about poor aesthetics and has been experiencing a bad taste and halitosis from the chronic infection. The prognosis for both of these teeth was poor.

Examination

The client was in good health. His remaining teeth exhibited 3-4 mm probing depths, normal mobility, adequate zone of keratinized gingiva and good gingival architecture and colour. The client had a high lip line and aesthetics were of primary concern. Occlusion was satisfactory and no other dental work was required.

Treatment Options

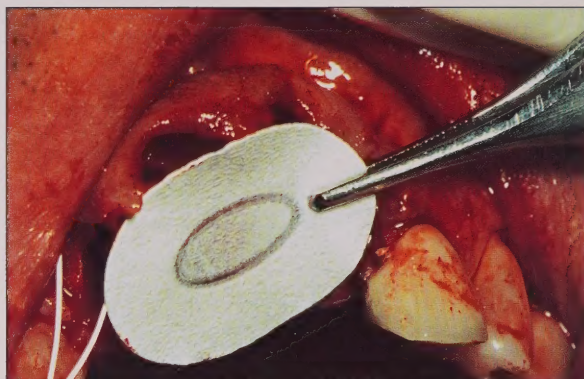
1. Extraction of the maxillary central incisors and the placement of a removable partial denture. (Since partial loss of the labial plate was possible, a flange may be required.)
2. Extraction of the maxillary central incisors and placement of a permanent bridge. (A fixed bridge would necessitate anchoring on the cuspids and would involve replacing some otherwise satisfactory dental work.) An osseous graft may be required if the bony ridge cannot be preserved.
3. Immediate implant placement.

Treatment of Choice

The client chose an immediate implant placement. This option allowed the bone to be preserved and prevented the resorptive process that may have occurred had the teeth been extracted. Furthermore, with the variety of restorative choices available today, one could utilize porcelain down to the soft tissue, making the teeth more natural looking.



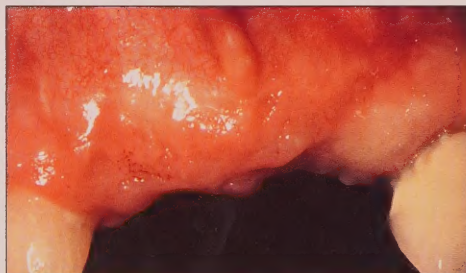
Implants placed in extraction sockets. Note the implants are not as large as the extraction sites they are placed into.



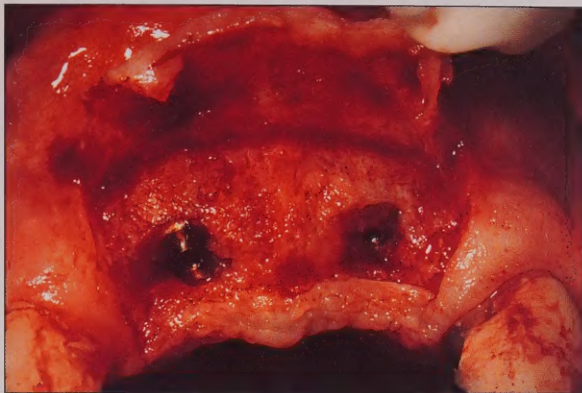
Gore-tex augmentation material being placed over the implants.

Although some periodontists maintain it is contra-indicated to place immediate implants in the presence of chronic infection in the socket, in this case the implant was placed despite the infection. However the socket was cleaned of all debris and granulation tissue before the implant was placed.

The next step undertaken was designed to maximize the amount of soft tissue available. The two central incisors were cut down under the height of soft tissue and a period of thirty days was allowed for soft tissue growth over the root stumps. (Note that the restorative dentist had attempted a root canal on one incisor in the past, and the other was non-vital at this time.) During this time the client wore a temporary removable partial denture that was adjusted as required.



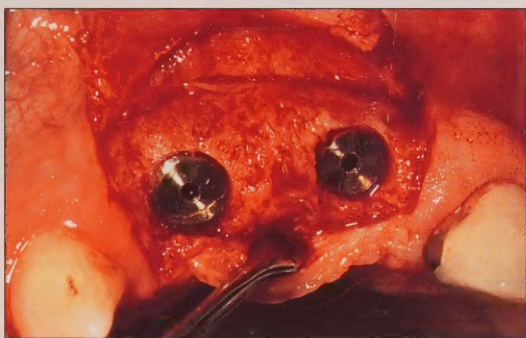
Soft tissue after six months of healing.



Surgical flap raised, Gore-tex augmentation material removed and evidence of bone growth over cover screws.

Surgical Procedure

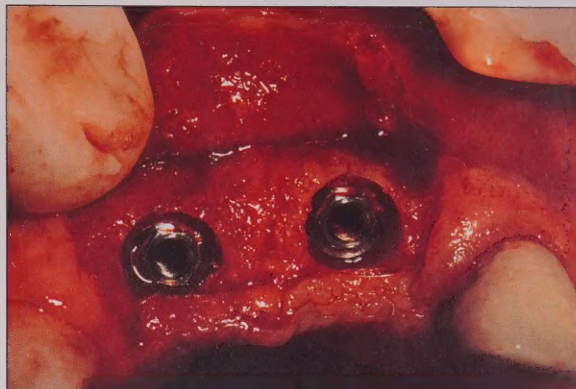
At the time of the extraction, the tissue was surgically flapped to gain access to the roots. The roots were gently removed with elevators so as not to disturb the bone. Two 18 mm 3I (Implant Innovations) implants were placed according to the Branemark protocol. The implants engaged virgin bone in the apical one-third, but did not fit the extraction sockets above that level. Cover screws were placed and an oval-four Gore-tex augmentation membrane was placed over the implants. The flap was closed to provide primary closure over the implants and membrane. Gore-tex sutures were utilized and removed ten days later. The client was placed on antibiotics for one week (Ampicillin 500 mg, one every six hours for seven days). A chlorhexidine rinse was prescribed to be used twice a day during initial healing and once a day for the remaining healing time. A new temporary removable partial denture was fabricated to be worn during the healing phase.



Cover screws removed after careful removal of excess bone.

The client was monitored every two weeks to check for membrane exposure. At six months the area was re-entered and the membrane was removed. Bone appeared to have grown completely over the cover screws. Implants were then uncovered using burs and chisels to remove excess bone. Specially designed trefines** for implant uncoverings were also used. Healing abutments of appropriate lengths were placed and the temporary partial was again adjusted so the client could continue to wear it during the restorative phase. During this phase, two free-standing implant crowns were placed.

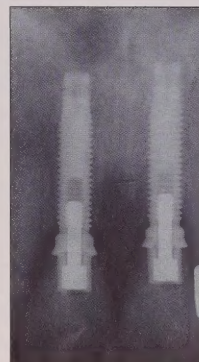
(**Trefines are metal bur-like pieces attached to the implant hand-piece and used to remove excess bone.)



Cover screws removed and external hex (i.e. hexagonal shape) of implant in view. (*This machined implant is designed with an external hex to ensure an exact fix with the machined internal hex of the abutment.)*

Discussion and Results

Utilization of membrane for space-making resulted in complete regeneration of bone with no connective tissue healing evident. Without the use of a membrane, the faster-growing connective tissue would likely have outgrown the bone. After four to six weeks of soft tissue healing, the restorative dentist was able to proceed with permanent restoration. Pleasing aesthetic and functional results were obtained without destroying other natural teeth. Radiographic examination confirmed complete bone fill around the implants.



Radiograph after permanent restoration.

In cases where all the bony walls cannot be retained, a bone graft as well as a membrane (may be required) to regenerate portions of the lost bony walls.

Leanne received her diploma in Dental Therapy in 1981 and a diploma in Dental Hygiene in 1982 from WIAAS in Regina, Sask. She has been employed with Dr. C.G. Ibbott, a periodontist in Regina, since graduation. Leanne received her dental implant training at the University of Washington in 1988 and has been extensively involved with implant procedures. As well as teaching and providing continuing education courses (primarily in Western Canada), Leanne teaches a dental implant class to the second year dental hygiene students at SIAST. For the past two years students received an accredited hands-on prosthetic course in cooperation with Nobelpharma. Leanne has published a number of articles in *PROBE*, the *CDA Journal* as well as co-authoring articles for various international journals and she was recently hired by 3i Implant Innovations to lecture in Canada and the U.S.

Case Studies are presented for the interest of our members. However, CDHA is not endorsing any specific interventions.

We welcome submissions of this nature from our members to encourage an exchange of information.

CLASSIFIEDS

Hygienist — BC

If one of your professional goals is to make a difference in people's lives, if you are a self-directed hygienist who wishes to combine superlative technical skills with your ability to influence patients to accept excellent dental care, and if you want to make a substantial contribution as a health-care professional, our full-time (Monday - Thursday) hygiene position may be just the opportunity you're looking for. We are seeking a cheerful and enthusiastic dental hygienist who wants to live in Duncan, BC to complement our great team of dental professionals. Please call Dr. Dale Benham's office at (604) 748-1842 or evening (604) 748-2086.

Worb, Switzerland

Full time hygienist needed for June 1st, 1995 in modern general practice in Worb, Switzerland. (6 miles from the capital Berne)
1-2 years of practical experience desired.
Furnished apartment available.
Contact Dr. Robert Lukacs, Schulhausstrasse 7,
CH-3076 Worb Switzerland
Phone: 41 31 839 67 05
Fax: 41 31 952 77 48

*Be a Leader in Selling
New Drugs & Diagnostics
to the Family Dentist*

We're hiring part-time PDAs, CDAs & hygienists to sell our growing line of new oral medicines and diagnostics across Canada. Compensation and training are attractive. Send your resume to Doug Houden at:

Knowell
221 Dufferin St., Suite 104A
Toronto, Ont. M6K 1Y9

Oral Medicine

Advertisers' Index

3M.....	109
Block Drugs.....	IBC
Butler	OBC
Dentsply	IFC
PerioReports	102
Perio Powerdotics	88
Warner Lambert.....	80, 95 (+ insert)
Young Dental.....	82

DENTAL HYGIENE WATCH

- White Italian leather band with gold tone casing
- 1" diameter white face with gold imprinting
- Five year manufacturer's warranty



- Face as illustrated
- Cost of \$50.00 includes GST, postage and handling
- Send cheque or money order to:

Northern Alberta Dental Hygienists' Society
c/o Sally Lockwood, RDH
6850-112A Street
EDMONTON, Alberta T6H 3K6
or call (403) 436-9832

- *Proceeds will be used to fund projects of the Northern Alberta Dental Hygienists' Society.*

Dental Hygienist Wanted

Starting September 15, 1995
Four days per week — \$200 per day,
6-8 clients per day, small town practice.
Four-hour drive to Jasper.
Snowboarder preferred.

Some relocation assistance available.
You must qualify to have your Alberta Licence.
Send CV to Box 539, Beaverlodge, AB T0H 0C0
or call (403) 354-2174, leave message.

Classified Ad Rates 1995

Fifty (50) words or less, per ad, minimum \$25.00 plus 7% GST (total: \$26.75). Each additional word 50¢ plus 7% GST (total: 54¢). Payment must accompany order or ad will not be placed. Closing date for receipt of copy is the 1st day, two months previous to publication date — November 1 for January/February issue, January 1 for March/April issue, March 1 for May/June issue, May 1 for July/August issue, July 1 for September/ October issue, and September 1 for November/December issue. Display classified rates based on 1/2 page (\$400.00 plus 7% GST, total: \$428.00) and 1/4 page (\$200.00 plus 7% GST, total: \$214.00). Non cancellable after closing date. No agency commissions on classified advertising. Ads will not be taken by telephone. Direct advertising copy, with cheque to:

Canadian Dental Hygienists Association
96 Centrepointhe Drive
Nepean (Ottawa), Ontario K2G 6B1

Note: GST does not apply to out-of-Canada advertisers of classified ads.



Two of these patients need your advice.

Dentinal Sensitivity is easily and effectively treated with the Sensodyne Complete Sensitivity Care System. Yet two thirds of sufferers may not alert their dentist to the condition, and discover the benefits of in-home therapy.

The other third are satisfied with the results of the Sensodyne dentifrice program⁽¹⁾.

Only Sensodyne gives the dentist and hygienist the range of "tools" necessary for a broad spectrum of patient profiles. It starts chairside with Sensodyne Desensitizing Solution and carries through to your recommendation for one of four dentifrice options, including the new Sensodyne-F Baking Soda Clean with a refreshing taste to maximize compliance. This range of dentifrice choices provides two modes of action; either by dentinal tubule occlusion (Sensodyne with 10% strontium chloride), or by nerve de-polarization (Sensodyne-F with 5% potassium nitrate). And we have added two specially designed extra-soft brushes, to encourage better oral health through regular, pain-free brushing.

Only Sensodyne maintains such a total commitment to the dental community ... as we have for over 30 years ...

through our policy of trial at no charge for both the dentist and the patient. You need only call to engage our support in helping your patients experience freedom from the pain of tactile, thermal or osmotic shock. Let us help remove one major obstacle to improved oral health.



The Complete Sensitivity Care System.

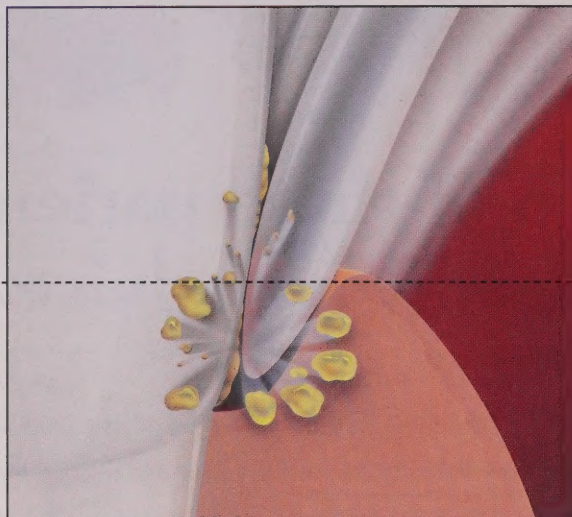
Sensodyne*
Toothpaste

*TM Block Drug Co. (Canada) Ltd. 7600 Danbro Crescent, Mississauga, Ontario L5N 6L6
1 800 387 4588 or 1 800 268 5747

(1) Data on file - Block Drug Co. (Canada) Ltd.

Visit us at our Table Display at
CDHA's 6th Annual Professional Conference in Halifax, June 23-25, 1995.

BUTLER ®



THERE ARE SOME LINES YOU NEED TO CROSS

That's why Butler stepped up to the line—and crossed it—by creating the G-U-M® toothbrush. Its rounded bristles are tapered to a .002" diameter to clean safely and gently, even in the hard to clean sulcus and interproximal areas where plaque accumulates. Texturized bristles effectively pick up and carry away harmful plaque, unlike polished bristles.



And its unique dome-shaped head is designed to reach under the gumline for exceptional plaque removal at any angle. Butler's G-U-M® toothbrush is clinically proven to help reduce and prevent gingivitis.¹ So cross the gumline with the G-U-M® toothbrush and give your patients a proven plaque fighting tool.



John O. Butler Company,
515 Governors Road, Guelph, Ontario, N1K 1C7
1-800-265-8353

Visit us at our Table Display at
CDHA's 6th Annual Professional Conference in Halifax, June 23-25, 1995.

© 1994 John O. Butler Company
¹ Data on file, 1993

THE CANADIAN DENTAL HYGIENISTS ASSOCIATION
JOURNAL DE L'ASSOCIATION CANADIENNE
DES HYGIENISTES DENTAIRE

PROBE



VOL 29, NO 4

JULY/AUG. 1995 JUILLET/AOÛT



Winnette MacPherson,
Dental Hygiene Student
Algonquin College

DENTAL LIBRARY
UNIVERSITY OF TORONTO
124 EDWARD ST.
TORONTO M5G 1G6
ONTARIO, CANADA

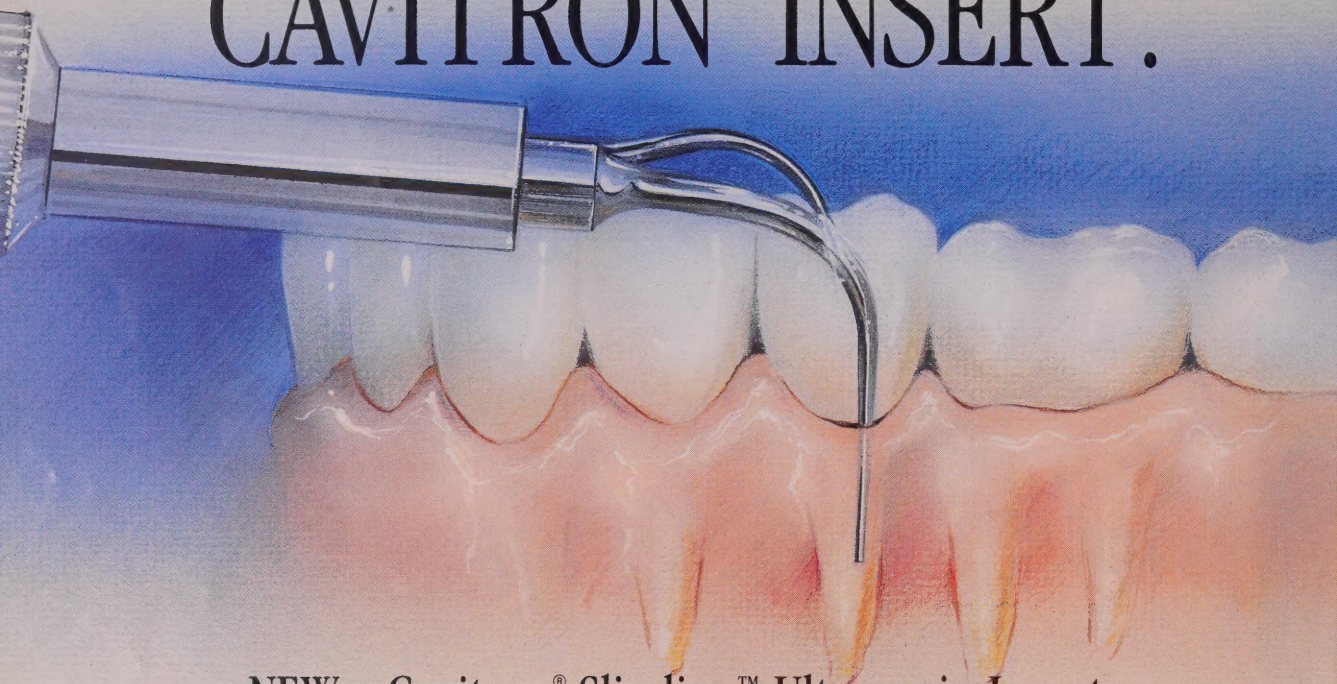
WHAT'S INSIDE:

REVIEW OF DH's PROFESSIONAL STATUS

NEWS FROM SCHOOLS ANNUAL FEATURE

PLACING TETRACYCLINE FIBRES

"I NEED A THINNER CAVITRON® INSERT."



NEW...Cavitron® Slimline™ Ultrasonic Inserts.

- 40% thinner than our standard inserts.
- Probe-like size and feel for easier insertion and exploration.
- Allow ultrasonic instrumentation to depths of up to 7mm.
- Require less soft tissue manipulation so patients are more comfortable.
- Thorough water lavage from external water tube.

With Slimline Inserts on your tray, you gain greater tactile feel, deeper subgingival access and improved patient comfort. Available in straight, right and left styles in 25K or 30K.

To order these innovative new Slimline Inserts, or receive additional information, contact your authorized DENTSPLY Canada Equipment Distributor or call 1-800-263-1437

SLIMLINE™

DENTSPLY
CANADA

161 Vinyl Court, Woodbridge, Ontario L4L 4A3 1-800-263-1437

Routine Dangers

By:

Dianne Landry, Dip DH, Dip DN, BA, BVIT Ed

"Summer time and the living is easy." By now most of you will be in some phase of summer vacation, a time to relax, get comfortable and forgo the usual routine.

But have you ever thought how comfortable a daily routine, this regime we carefully construct for ourselves in order to get the job done, can be? Sometimes it's called 'being organized'. The new graduate bemoans the widely frantic feeling of always being behind in the appointment schedule. "Don't worry," says the expert, "Just wait until you've established a routine, everything will be fine, your speed will increase and you will be able to finish your clients on time."

There is a certain amount of truth in this statement. Dental hygienists at the 'entry-to-practice' level need time to refine their technical, communication and diagnostic skills. There is some concern with the establishment of the routine approach to client oral health care: SEAT, GREET, SCALE, POLISH, BRUSH AND FLOSS.

Current research reports that dental hygiene practice is changing due in part to evidence regarding the etiology of periodontal disease and the effectiveness of traditional oral hygiene therapies. Root planing to a glassy smooth surface does not necessarily halt or prevent periodontal disease. The influence of the body's immune system, the effects of certain bacteria and the use of antimicrobials are now important factors to consider. The question arises: "Do we really need to polish every surface of every tooth of every client every visit?"

Why do some oral health care professionals still follow this scale and polish regime? The most common rationale I have heard is that 'the client expects it' or 'that's why they come to the office, for a "cleaning"'. If that is why your clients are coming to see you, then you are too comfortable in your routine!

The following information can be found in the recently published dental hygiene text-

books, Wilkins (1995), Woodall (1994) and Darby and Walsh (1995).

The superficial polishing of the crown is now considered a purely cosmetic procedure with minimal therapeutic benefit. Therapeutic polishing instead refers to polishing root surfaces that are exposed during surgery to reduce endotoxins and microflora on cementum. Traditionally, dental hygienists believed that it was their role to polish plaque and stain off the *patient's* teeth. However it has been shown that stains on teeth are not etiologic factors in any disease or destructive process and removal of plaque must be a daily procedure carried out by the client.

Pellicle returns to cover the teeth in minutes, plaque bacteria begins to collect on pellicle within 1 to 2 hours and after 12 to 24 hours, plaque is thick enough to show clearly when a disclosing agent is applied. How useful then, is removal of plaque by the dental hygienist once or twice a year?

Polishing can remove the fluoride rich outer layer of enamel. This can adversely affect the clients with thin enamel, demineralized areas or xerostomia. Polishing enamel in young children is especially destructive since surfaces of newly erupted teeth are not completely mineralized. Cementum and dentin are softer and more porous, so greater amounts of this layer are removed during polishing. A coarse abrasive may create a rougher tooth surface than existed before polishing. A smooth surface that is the result of root planing does not need further polishing.

What about before a topical fluoride application? We need a clean plaque-free surface, right? WRONG! Current research shows that pellicle on the tooth surface does not act as a barrier to the penetration of fluoride. There is little difference in the uptake of fluoride from a topical application of fluoride in teeth that were polished by an abrasive and those brushed by the client.

A bacteremia may be created during the use of a power-driven stain removal instrument. During the polishing, microorganisms may be forced down into the tissues causing an inflammatory response which, in turn, causes bacteria to gain access to the blood stream. An overzealous rubber cup prophylaxis can remove the epithelium from the inside crest of the free gingival tissue. Particles of the polishing agent can be forced into the lining of the pocket if performed after scaling, root planing or curettage, acting as an irritant which may cause further inflammation.

Does all of this evidence mean that we should never polish tooth surfaces? No, it means we use the principle of **selective polish**: not every client needs polishing on a routine basis. Professional judgment based on all of the individual client's needs should determine which therapies are included in the treatment plan.

Whenever possible extrinsic stains should be removed during the scaling procedure. Removal of extrinsic stains initially for the new client can be used as a teaching tool. The client will be made aware of the appearance and feeling of a clean mouth which may help motivate them to improve their self care. Or, polish off unsightly stains after your client has demonstrated adequate plaque control. With children you may choose to use disclosing solution and have them perform a self-prophy before fluoride application (that may or may not be necessary as well). Explain to your clients the contraindications to routine polishing of all teeth every visit. Take the time to encourage and educate your clients to make the necessary change in their habits that may be contributing to the deposit of the plaque and stain.

Change your old routine. Educate yourself, your colleagues and your clients to the principle of selective polish. It will feel uncomfortable for a while but the change will benefit your clients oral health. Soon they will be saying "NO POLISH PLEASE". 

LISTERINE* **FIGHTS GINGIVITIS** **AS EFFECTIVELY** **AS CHLORHEXIDINE.**



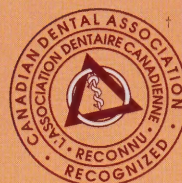
A recent clinical study¹ concluded that Listerine inhibited the development of gingivitis² as effectively as 0.12% chlorhexidine. In fact, Listerine reduced the development of gingivitis by almost 36% over brushing and flossing alone¹.

% REDUCTION OF GINGIVITIS SCORES VS. CONTROL AT SIX MONTHS



* Equivalent for gingivitis reduction at 6 months ($p < 0.001$)

Unlike chlorhexidine, Listerine works without causing side effects like extrinsic tooth stain¹. Listerine is the only oral rinse, prescription or nonprescription, to receive the Canadian Dental Association's seal of recognition for efficacy in the reduction of plaque and gingivitis².



Twice daily rinsing with Listerine works synergistically with brushing, flossing and your professional care¹. If you'd like to find out more about Listerine call 1-800-683-1650. We'll give you all the facts.



**LISTERINE FIGHTS GINGIVITIS
WITHOUT STAINING**

† "Listerine helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care." CANADIAN DENTAL ASSOCIATION² Gingivitis was evaluated using the Modified Gingival Index. Listerine: Do not swallow. Not to be used by children under 12 years of age. Keep out of reach of children.
*TM Warner-Lambert Company Warner-Welch Inc. use Scarborough, Ontario M1L 2N3.

1. Overholser CD et al. Comparative effects of two chemotherapeutic mouthrinses on the development of supragingival dental plaque and gingivitis. J Clin Periodontol 1990;17:575-579.
2. Data on file, 1995.



COLLEAGUES FROM COAST TO COAST

Dental hygiene students Linda Roth, Lin Smith, Sue Noble and Winnette MacPherson grouped together to develop a table clinic on "the first dental visit". The dental background back board and cookie monster client idea came to mind when they focused on their target audience: 2-5 year olds.

Editorial 117

Routine Dangers

— Dianne Landry, Dip DH, Dip DN, BA, BV/TEd

President's Message 121

Looking Back

National Dental Hygiene Campaign — Order Form 122

News 123

Scientific 127

1) Is Dental Hygiene a Profession? A Literature Review

— Charla Lautar, BS, Dip DH, MEd, PhD

Feature 133

News From Schools — Annual Report

Abstracts 140

Osteoporosis: A Risk Factor in Periodontal Disease

Tooth Bleaching For Children and Teens: A Protocol and Examples

— prepared by Carol Barr Overholt, Dip DH

Book Reviews 141

Dental Radiography Laboratory Manual

— Reviewed by MWO Claude Bujold, Dip DH

Managing Oral Health Care Delivery, A Resource for Dental Professionals

— Reviewed by Audrey Newcombe, Dip DH, BSc

Resource Centre — New Acquisitions 142

Self-Assessment Test 143

Facts on Aging

— prepared by Maureen Adams, BScDH

Ethics: Sharpen Your Professional Edge 144

— prepared by Nancy Neish, BA, Dip DH, MEd and Brenda Fortune, Dip DH

Continuing Education 146

CDHA's 7th Annual Professional Conference 146

Call for Papers

Practice Profile 147

— Melinda Ferguson

Student Scene 149

Case Study 150

Use of Tetracycline Fibre to Treat Localized Unstable Periodontitis

— Leanne D. Carlson-Mann, Dip DT, Dip DH

Classifieds 152

The Canadian Dental Hygienists Association Journal: Probe is the official publication of CDHA. CDHA invites submissions of original research, discussion papers, and statements of opinions pertinent to the dental hygiene profession. All manuscripts are refereed anonymously. Contributions to Probe do not necessarily represent the views of the CDHA, nor can CDHA guarantee the authenticity of the reported research. Copyright 1995. All materials subject to this copyright may be photocopied for the non-commercial purpose of scientific or educational achievement.

CONTENTS



The Canadian Dental Hygienists Association
L'Association Canadienne des Hygiénistes Dentaires

PROBE

JULY/AUGUST
1995
JUILLET/AOÛT

Editorial Director/Scientific Editor:

D. Landry, Dip DH, Dip DN, BA, BV/TEd

Managing Editor: J. Edgar, BJ

Statistical Reviewer: R. Dunford, BSc, MSc

Contributors: Carol Barr Overholt, Dip DH

Leanne Carlson-Mann, Dip DT, Dip DH

Nancy Neish, BA, Dip DH, MEd

Brenda Fortune, Dip DH

Editorial Board:

E. Brownstone, BA, Dip DH, MEd

S. Amer, Dip DH, MS, L. Boomhour, Dip DH

M. Goulding, Dip DH, BSc, L. Guest, Dip DH, BHE

Design: Nancy Poirier Type Services

Published six times a year by the

Canadian Dental Hygienists Association,

Centrepointe Chambers, 96 Centrepointe Drive

Nepean (Ottawa), Ontario K2G 6B1 • Tel (613) 224-5515

Canada Post Publications Mail Registration No. 5793

CANADIAN POSTMASTER:

Notice of change of address and undeliverables should be sent to the

Canadian Dental Hygienists Association

Centrepointe Chambers, 96 Centrepointe Drive

Nepean (Ottawa), Ontario K2G 6B1

Subscriptions \$69.55 (GST included) in Canada, \$110.00 Cdn.

for U.S. & \$115.00 Cdn. elsewhere. Fifty cents per issue is

allocated from membership fees for Journal production. All

statements are those of the authors and do not necessarily

represent CDHA, its executive, or its staff.

Advertising & Subscriptions:

Keith Health Care Communications

1382 Hurontario Street

Mississauga, Ontario L5G 3H4

(905) 278-6700

© CDHA 1995

6176 CN ISSN 0 834-1494

GST Registration no. R106845233



CDHA Central Office Staff

Executive Director

Carol Matheson Worobey

Manager, Publications & Conference

Janice Edgar

Financial Coordinator

Monique B. Rock

Member Services Coordinator

Sandra Vanwart

Member Services Assistant

Sue Turcotte

Administrative Assistant

Donna Awrey

All CDHA members are invited to call CDHA's Central Office,

toll-free, with their questions/inquiries:

1-800-267-5235, Fax (613) 224-7283

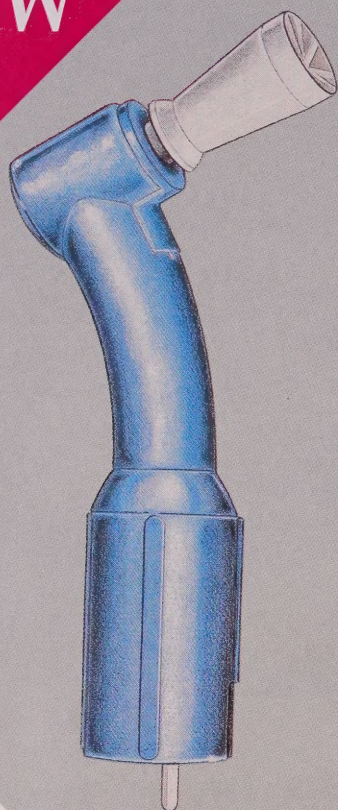
We look forward to serving you.

Advertisers' Index

Butler	142
Canadian Centre for Continuing Dental Education	142
Canadian Straight Wire	148
Dentsply	148
Knowell Therapeutics	148
Perio Powerdents	126
PerioReports	132
Warner Lambert	118, 143
Young Dental	120

We're Bent on Making Your Prophies Easy . . .

NEW



the
**CONTRA
DISPOSABLE™
ANGLE**

by
Young Dental

- ◆ **Contra**
- ◆ **Control**
- ◆ **Comfort**
- ◆ **Convenience**

We're doing back-flips over our new angle! The Young Contra Disposable Prophecy Angle is the only disposable angle with a contra-bend in the neck, providing the control and comfort you're used to. It allows for greater access and reduces fatigue. And it's all available in a disposable. An easier cleaning is just around the bend.



13705 Shoreline Court East • Earth City, MO 63045
800-325-1881 • 314-344-0010

Contact Your Dental Supplier To Order

Looking Back...

It is a privilege to be able to serve as your president for the coming year. It promises to be a busy and exciting one, holding many developments and activities which will help shape our future. We all have a vital interest in the future of dental hygiene in Canada, and in the coming issues I will share some of my expectations. Paradoxically, however, I want to spend this message looking back.

There are two reasons for this. First, historians tell us that if we do not acknowledge our history we are doomed to repeat our mistakes. Second, the Canadian Dental Hygienists Association has a very distinguished record, which we should acknowledge, and of which we should be proud.

So, let me cite just a few of the landmarks of our brief history.

It is now just over three decades since the four existing provincial dental hygienists' associations launched the Canadian Dental Hygienists Association. There were then only a few hundred dental hygienists in the whole of Canada, but even then there was an awareness of the importance of joining together to represent our profession at the national level. The Association very soon made its presence known. One opportunity to do so occurred in 1967, when the federal government created a commission to report on the role of dental auxiliaries in Canada. CDHA requested to have a member on that commission. We were refused this request, but prepared and presented a thoughtful and well-organized brief which drew favourable comment from the commission.

The 1980 federal government review of medicare gave CDHA another opportunity to speak in a national forum. Some of the opinions expressed in that brief — such as that dental hygienists would eventually work more independently than was then the case — aroused and alienated some of our dental colleagues. This unfortunately eclipsed discussion of many other points in the brief, such as the recommendations that the role of dental hygienists in community health settings and in providing care for underserved sectors of the population be enhanced.

In 1981 the federal government established the Working Group on the Practice of Dental Hygiene. In contrast with the Commission fourteen years earlier, the majority of this thirteen member group were dental hygienists, including the chair. All of the dental hygienists on the Working Group were CDHA members who were active in the national association, including one



**MARGERY FORGAY,
DIP DH, BEd, MA, PhD (Hon)**

past president. They came from all parts of Canada and worked in private practice, community health, and dental hygiene education.

One of the most influential activities of the Working Group was its co-sponsorship, with the University of Manitoba School of Dental Hygiene, of the first conference on dental hygiene research that was ever held. The Quebec Dental Hygienists' Association also assisted with funding this event. This conference's Proceedings still make pertinent reading.

The Working Group produced two other documents in 1988. Part One contains a discussion, recommendations and guidelines for dental hygiene practice in Canada. Any student who graduated in the years immediately following the publication of this report likely had it on her or his reading list. Part Two was a very significant landmark: a statement of clinical practice standards. In contrast to many practice standards statements which are written by a few leaders in a field, the practice standards for Canadian dental hygienists were generated and content-validated by practicing Canadian dental hygienists. In other words, practicing dental hygienists determined what the standards of practice should be. The practice standards were distributed to every dental hygienist in Canada. CDHA was concerned, however, that they might not be easily used for self-evaluation and improvement of care, so workshop materials were created and made available throughout the country. Many of you will have participated in these workshops.

CDHA has recognized that dental hygiene areas of responsibility encompass more than

clinical practice. Currently, the practice standards have been revised and expanded to encompass not only clinical practice, but administration, research, community health and education.

The contributions of CDHA in the area of dental hygiene education have been many, including working with what is now the Commission on Dental Accreditation of Canada to identify basic competencies which must be included in all dental hygiene programs. Currently, CDHA's Professional Development Council, in collaboration with the Allied Dental Educators Committee of the Association of Canadian Faculties of Dentistry (ACFD), is developing a statement of education standards and updated competencies (including related skills and knowledge) that will hopefully serve our profession into the turn of the century.

The CDHA Code of Ethics, was completely rewritten a few years ago. It is considered by ethicists to be one of the best in the area of Canadian health professions. However, since even a Code of Ethics is not a static document, CDHA is now reviewing it to see if changes are in order.

National Certification, which will both help establish a nation-wide standard for entry to practice and make movement of dental hygienists from one jurisdiction to another easier, is now firmly established. It is the result of many years of work by CDHA. Our certification process is unique in that it is developed and controlled by dental hygienists.

CDHA has also been actively involved in supporting provincial associations in their pursuit of self-regulation. Currently, the overwhelming majority of dental hygienists in Canada reside in areas where the profession is self-regulating: Quebec, Ontario, Alberta and British Columbia. Other provinces are seeking similar status, and CDHA is continuing to support them with financial assistance, and activities such as the Legislation Workshop at the Halifax Conference that was held in June 1995.

These are just some of the events and activities of the volunteers of CDHA that have, in a very short space of years, established our maturity and credibility as a national professional organization. Take pride and satisfaction in our past. It gives us great cause for optimism for our future, both immediate and long term.



National Dental Hygiene Campaign

The National Dental Hygiene Campaign is the responsibility of CDHA's Health Promotion Council.

CDHA Health Promotion Council

Chair: Judy Parker Victoria, BC
Members: Sharyn Milroy Moncton, NB
Patricia Noble Prince George, BC
Wanda Staples Ottawa, ON
Heather Tommy Ottawa, ON

National Dental Hygiene Campaign Coordinator

Dawn Mueller
131 Douglas Shore Close SE
Calgary, AB T2Z 2K8
(403) 720-0353

Provincial Campaign Co-ordinators Newfoundland

Alisa Greidanus
10 Nightingale Road
St. John's, NF A1E 2G5
(H) (709) 745-3956

Prince Edward Island

Julie Muise
524 St. Peter's Rd.
RR #3
Charlottetown, PE C1A 7J7
(H) (902) 628-1931 (W) (902) 566-1515

Nova Scotia

Francine Pellerin
70 Lansdowne #102
Halifax, NS B3M 3Z3
(H) (902) 445-4627 (W) (902) 423-9337

New Brunswick

Richard Irvine
97 Garden St.
Renforth, NB E2H 1J7

Quebec

Dianne Farrell
9318 Centrale
Lasalle, Quebec H8R 2K3
(H) (514) 368-8640 (W) (514) 457-6610

Ontario

Juli Pearson
1042 Murphy Rd.
Samia, ON N7S 2Y2
(H) (519) 542-1714 (W) (519) 542-1447

Manitoba

Pamela Swanson
Kinczylo, RMB 15, RR #1
Selkirk, MB R1A 2A6
(H) (204) 482-3274 (W) (204) 482-3025

Saskatchewan

Lesa George
203 Hector Cres. N.
Regina, SK S4Y 1C1
(H) (306) 543-8269 (W) (306) 949-6626

Alberta

Alberta Dental Hygienists Association
c/o Josephine Juchli
222, 8657 - 51st Ave.
Edmonton, AB T6E 6A8
(403) 465-1756

British Columbia

Karen C. Gallagher
16275 87th Ave.
Surrey, BC V4N 1B7
(H) (604) 572-9110 (W) (604) 590-5010

Canadian Forces

Judy Parker
11 Dental Unit Detachment
CFB Esquimalt
Victoria, BC V0S 1B5

Order Form

Please print or type

Complete and mail to: **Canadian Dental Hygienists Association**
96 Centrepointe Drive
Nepean, Ontario K2G 6B1

Name: _____

Address: _____ Suite #: _____

City: _____ Province: _____ Postal Code: _____

Telephone: () _____ CDHA Membership #: _____

Payment Enclosed: _____ VISA/MC#: _____

Expiry Date: _____ Cardholder Name: _____

Item	Quantity	Unit Price		Total
		Mem.	Non-mem.	
BABIES: (All Fact Sheets in pads of 50 with CDHA Logo only)				
Facts About Fluorides		\$10.00	\$20.00	
Facts About Nursing Bottle Decay		\$10.00	\$20.00	
Facts About Teething		\$10.00	\$20.00	
Facts About Mouth Care Infant/Toddler		\$10.00	\$20.00	
TODDLERS:				
Facts About First Dental Visit		\$10.00	\$20.00	
Facts About Mouth Care Preschool Child		\$10.00	\$20.00	
TEENS:				
Facts About Mouth Care		\$10.00	\$20.00	
Facts About Gum Disease		\$10.00	\$20.00	
Facts About Smokeless Tobacco		\$10.00	\$20.00	
Poster (small)		\$1.00	\$2.00	
SCHOOL AGED CHILDREN:				
Facts About Mouth Care		\$10.00	\$20.00	
Facts About Fissure Sealants		\$10.00	\$20.00	
Poster (small)		\$1.00	\$2.00	
OLDER ADULTS:				
Facts About Mouth Care		\$10.00	\$20.00	
Facts About Gum Disease		\$10.00	\$20.00	
Facts About Denture Care		\$10.00	\$20.00	
Facts About Oral Cancer		\$10.00	\$20.00	
Poster (large)		\$1.00	\$2.00	
GENERAL:				
Facts About Dental Hygienists		\$10.00	\$20.00	
Facts About Oral Care		\$10.00	\$20.00	
Facts About Gum Disease		\$10.00	\$20.00	
Stickers	100	\$10.00	\$20.00	
Careers in Dental Hygiene Fact Sheet		\$10.00	\$20.00	
Portability, Placement, Practice-Licensure		\$10.00	\$20.00	
SWEATSHIRT				
*Purple with white logo M & L		\$25.00	\$50.00	
*White with purple logo M L XL		\$25.00	\$50.00	
*Please circle sweatshirt size				
Shipping & Handling All orders will be sent with prepaid shipping charges as follows: *Under \$29.00\$5.00 From \$30.00 to \$99.00\$8.00 Over \$100\$12.00 Over \$250.00 call our toll-free number 1-800-267-5235 for applicable charges.				Total Order
				Shipping
				(Total Order & Ship.) Sub Total
				Please add 7% GST (No. R106845233) to Sub Total
				Ont. residents please add 8% PST to Sub Total
Phone orders accepted for VISA 1-800-267-5235				

Executive Council

President
Margery (Marnie) Forgy
President Elect
Sue MacIntosh
Vice President
Judy Clarke
Past President
Maxine Borowko

Member Services

Chair, Diane Skene
Aileen Seed

Audrey Newcombe
Luisa Mohan
Barbara Hewton

Health Promotion

Chair, Judy Parker
Sharyn Milroy
Wanda Staples
Patricia Noble
Heather Tommy

Practice & Regulation

Chair, Kathleen Adams

Darlene Armstrong
Pamela Vokey
Sue Raynak

Professional Development

Co-chairs:
Eleanor McIntyre
Corinna Recker
Bonnie Craig
Charla Lautar
Stephanie Nagle

**Health Canada
Representative to
Board**
Sharon Amer

**Corporate Relations
Officer**
Audrey Newcombe

Speaker
Lynn James

**IFDH
Representatives**
Dale Scanlan
Ellen Brownstone

NDHC Coordinator
Dawn Mueller

NEWS


The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

Your Professional Partner

Joanne Clovis Awarded the 1995 CDHA/Procter & Gamble Graduate Student Research Award



During the Opening Remarks of CDHA's 6th Annual Professional Conference held June 23 in Halifax, CDHA life member, Joanne Clovis, was awarded the 1995 CDHA/Procter &

Gamble Graduate Student Research Award. The presentation was made by P&G representative, Kimberly Johnstone in front of more than 400 conference delegates.

Joanne is a graduate of the University of Alberta and holds a diploma in Dental Hygiene and the degrees of Bachelor of Education and Master of Science. Her professional career has spanned a broad range of private practice, public health, public and dental hygiene education, administration and government consulting. She has been an active member of the Canadian, Alberta and Nova Scotia Dental Hygienists' Associations and was project director for the CDHA's highly successful "Smile...for Life" project. She was a member of the federal government's Working Group on the Practice of Dental Hygiene in Canada

and the Steering Committee on Oral Health Promotion. Her contributions to dental hygiene have been recognized by the awarding of a gold medal for community service by the Alberta Dental Hygienists Association and honorary life membership by the Canadian Dental Hygienists Association.

Joanne is currently Associate Professor and Director of the School of Dental Hygiene at Dalhousie University. Her research interests are varied and include dental hygiene education; primary preventive strategies and therapeutics and their acceptance by the public; and, health program planning, evaluation and legislation. At present she is registered in the interdisciplinary PhD program at Dalhousie University and will pursue full-time study for the academic year of 1995/96.

The CDHA/Procter & Gamble Graduate Student Research Award is a \$5,000 scholarship awarded annually. The program is designed to promote the research training of Canadian dental hygienists in research-oriented Masters or Doctoral programs.



Advice for Latex Allergy Sufferers

In a recent issue of RDH, in the "Letters" section, Kris York, a dental hygienist from Manitowac, Wisconsin writes: I am an RDH with a latex allergy. I have found non-latex gloves that fit as good as latex. They are the Sensicare gloves made by Becton and Dickinson. We order them from Patterson Dental Supply. I am so allergic to latex that I

can't even wear the masks because of the rubber strap. I wear a shield instead. These gloves fit great and are as comfortable as latex. I've been wearing them for almost three years now and have never had a problem. I hope this helps some of your readers with latex allergies."

CDHA Appoints New Corporate Relations Officer



Audrey Newcombe of Charlottetown, PEI was appointed by CDHA's Board of Directors to be the Association's Corporate Relations Officer effective July 1, 1995.

Audrey is a CDHA Past President (1985/86) and is presently completing her term as a member of the Board of Directors, sitting on the Member Services Council. She is a CDHA Life Member and has dental hygiene experience in administrative, clinical (private practice and public health) and educational settings. She is currently working as an instructor in the Dental Assisting Program at Holland College in Prince Edward Island (a position she has held since 1991) and working in private practice. She was a Dental Hygiene Consultant with Horner Pharmaceuticals from 1988-1989.

She holds a Bachelor of Science (Health Sciences) from the University of Waterloo and a Diploma in Dental Hygiene (Restorative) from the University of Manitoba.

Audrey is also an active community member. She is a member of the PEI Child Youth Steering Committee, a member of her province's Committee on Program Evaluation and Student Assessment and served as a member on Health Canada's Committee to develop Practice Standard Guidelines for the Dental Community on issues of Family Violence. From 1986-1989 she served as CDHA's Public Relations Coordinator.

1995 AquaFresh Student Scholarship Winners Honoured in Halifax

Steve Cameron, a second-year dental hygiene student at Dalhousie University and Leonard Serfaty a second-year dental hygiene student at the University of Manitoba's School of Dental Hygiene were the 1995 AquaFresh Student Scholarship winners.

The students were presented with their awards during CDHA's 6th Annual Professional Conference held in Halifax, June 23-25. SmithKline Beecham representative, Julia Alexander, was on hand to present the awards to the students during CDHA's Annual Awards Lunch held on June 25 at the Sheraton Halifax.

Steve presented his table clinic entitled, "The Importance of Protective Eyewear for Dental Professionals" at the conference. He has been actively involved with the profession since entering the dental hygiene program at Dalhousie. In his first year he was nominated to meet with the accreditation team to offer constructive criticism of the school's dental hygiene curriculum.

During his second year Steve remained active in the profession. He was elected President of the School's Dental Hygiene Society by his peers. He also worked with faculty and dental hygiene students at the School to create a teaching award in honour of the late Andrea Brennan, a former Dalhousie student and instructor and past president of the Nova Scotia Dental Hygienists Association.

In November 1995 Steve appeared on CTV's "Breakfast Television", a show broadcast locally in Halifax. Through this experi-

ence he helped to promote oral hygiene through a two-hour fun-oriented games session. He says he is also considering a 'repeat performance' of this activity next fall.

Leonard Serfaty has a similar record of participation in the profession to his credit. In the past year he has submitted two papers for consideration for publication in *PROBE*. In addition he was an active participant in the CDHA's 1994 National Dental Hygiene Campaign, developing a table clinic on 'Kissing and Saliva' that was presented to high school students in Manitoba.

In February 1995 he delivered oral health presentations to three groups of Grade 7 students. In addition, he and a classmate presented two oral health presentations to Grade 2 students at Niji Mahkua School — Canada's only inner-city aboriginal school.

In March 1995, Leonard delivered a presentation to his classmates about the professionalization of dental hygiene and discussed the issue of independent dental hygiene practice. In April, he and his classmates visited an English as a Second Language school and presented oral health information and details about careers in dental hygiene to the students.

The AquaFresh Student Scholarship is awarded annually to two undergraduate dental hygiene students who have made significant contributions to the advancement of dental hygiene. Each recipient is awarded a cash prize of \$1,000 and has an opportunity to attend CDHA's Annual Conference (conference registration fee, air and hotel expenses covered).

World Health Organization/Pan American Health Organization Fellowships



On behalf of Health Canada, the Canadian Society for International Health has announced details of the annual World Health Organization (WHO)/Pan American Health Organization (PAHO) competition for fellowships for Canadian citizens wishing to undertake short-term studies abroad.

Some 10 to 15 fellowships, up to a maximum of \$5,000 US each, are expected to be approved this year.

Health personnel eligible to apply include those persons who have finished their formal professional training, who have several years of experience, and who now wish to continue their professional development in a health-related field relevant to their work.

Fellowships are intended for persons currently working in the health system. Persons engaged in pure research, undergraduate and graduate university students, and persons whose application is only related to attending an international meeting or conference, are not eligible to apply for WHO/PAHO fellowships.

Applicants for WHO/PAHO fellowships will be rated by a Canadian Selection Committee on the basis of education, experience, proposed area of study, field of activity, and the intended use of their newly acquired knowledge. The final decision regarding the awarding of a fellowship rests with the World Health Organization/Pan American Health Organization.

Applications must be received before **September 15, 1995**. Additional information and application forms can be obtained by contacting:

WHO/PAHO Fellowships
Canadian Society of International Health
170 Laurier Ave. W. Ste 902
Ottawa, ON K1P 5V5
Tel: (613) 230-2654 (ext. 309)
Fax: (613) 230-8401

Have an ethical problem?
Don't know where the boundaries are?
Need help to make a decision?
CDHA Code of Ethics — Read it!

All Aboard for Dental Hygiene Services!

In last month's issue we published a Practice Profile about Nina Burnham, Canada's first native dental hygienist. An interesting footnote to her submission: From July 1 to September 30 1965-1969 Nina volunteered to work aboard the Canadian Coast Guard Ship, C.D. Howe. The ship's passengers included approximately 20-22 members of a medical team: physicians, nurses, dentists, x-ray technicians, radiologists, an ophthalmologist and other necessary staff, including interpreters.

Nina reports that the ship embarked on its 10,000 mile journey from Quebec City. It traveled north and stopped at all Inuit Settlements along the Hudson Straits and the Baffin Island coastline, heading to Canada's most northerly settle-

ments Grise Fiord and Resolute Bay. The ship carried food and oil for the residents and nursing stations



(now referred to as Community Health Centres) in the settlements, in addition to the medical staff who were traveling to provide health services to northern residents.

According to Nina, "This was the opportunity of a lifetime!" It allowed her to experience Inuit culture and customs. She describes it as a "rewarding highlight" of her career. She says she will always cherish these memories and that as a Native person she understood the value non-verbal communication can play in such situations. She notes that by reading people's eyes and facial expressions you can learn much; words are not always necessary. No doubt many dental hygienists engaged in private practice can also identify with the importance of non-verbal communication.

Allied Dental Educators Committee to Undertake Membership Survey

The Association of Canadian Faculties of Dentistry (ACFD) Allied Dental Educators' Committee (ADE) met in San Antonio, Texas, March 10, 1995. (This is the committee which formally represents dental hygiene education in Canada.) Joanne Clovis, CDHA's representative on the committee, reports that the Committee is undertaking a survey of its allied and institutional members to help determine its shape and organization for the future. The survey will include questions on ACFD's constitution and bylaws, ADE's terms of reference, structure and funding, and communication channels. Since this is the only formal Canadian group in existence at the national level for dental hygiene educators, the results of this survey will be significant to the profession.

During the March meeting, the ADE also reviewed the draft document of Education Standards developed at the CDHA/ACFD Education Standards Workshop held in Winnipeg last fall. ADE will be submitting a proposal to support the validation process of the educational standards contained in the document.

Also during the March meeting, CDHA member Joanne Clovis and Certified Dental Assistant Maureen Symmes were elected to represent ADE/ACFD at the Commission on Dental Accreditation.

During ACFD's Annual Meeting, also held in San Antonio in March, a new constitution and bylaws were supported. Under the new bylaws, the Allied Dental Educators Committee's voting positions on Council were increased from one to ten. There are, in total, 43 voting positions on the Council. Of the ten voting positions allocated to the ADE Committee, one will go to the Committee's Chair, one to the ADE representative to the Faculty Member Development Committee (FMDC) and one to the ADE representative to the Curriculum Development Committee (CDC). The remaining seven will be determined by the ADE Committee.

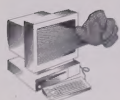
Joanne Clovis (CDHA) and Ann Cant (CDAA), both ACFD representatives for their respective Associations, are also representatives to the CDA Council on Education and attended the council's annual meeting that was held on June 5 in Ottawa.



We neglected to provide details about the authors who prepared the Editorial for the May/June issue. Joan Simpson and Sharon Amer work for Health Canada, Joan with the Family Violence Program in the Mental Health Division, Sharon with the Issues, Analysis and Planning Unit in the Health Service Systems Division. Joan brings a professional background in social work to the family violence issue, and Sharon one in dental hygiene. Sharon is also the Health Canada representative to CDHA's Board of Directors and a current member of

Errata

In a feature article appearing in the May/June issue of *PROBE* entitled, "Beyond the Call of Duty...Providing Oral Health Care in the Honduras" we incorrectly identified the individual in the photo on the far left. Our apologies to Michel Guenette (husband of the article's author Lorraine Langevin) for misidentifying him as Dr. Shapka. Sincere apologies for any embarrassment this oversight may have caused.



Health Promotion On-line

(Reprinted from the Winter 1994-95 issue of *Health Promotion in Canada*, a publication of the Health Promotion Directorate with the kind permission of Health Canada)

Health Promotion On-line (HPO), Health Canada's new electronic information system, is up and running. With government on-line services playing an increasingly important role in serving the public, this puts the department at the forefront of the new technology.

It provides a new and easy way for clients and others in the Health Promotion network to make contact with each other and with the Health Promotion Directorate (HPD), and gives users fingertip access to a wealth of health promotion information — from strategies to programs and publications.

The range of information and services available on-line is expanding all the time. Depending on what the Health Promotion Directorate hears from user feedback, you may soon be able to tap into a comprehensive publication library, the latest research and databases, health promotion tools, policies, strategies and guidelines, as well as directories, bibliographies, the departmental telephone book and a list of upcoming events. Reports on workshops and conferences, speeches and presentations, HPO's E-mail and on-line "chatting" services will also be on the menu.

You can view the information on-line or download it via modem to your home or work computer. With a 14 000 bps modem, it takes less than a minute to download a 160-page (uncompressed) or 400-page (compressed) document.

For all its complexities, the system is a friendly one. Users are aided by easy-to-

understand prompts, an on-line tutorial and a glossary of terms. Once you've got the knack of hooking in, the easy-to-use system will glide you through the "ins and outs" of information access.

A special source of pride to HPD is the system's bilingual service. Not only are virtually all publications and other information available in both official languages, the user interface is also bilingual. Other customized client services will be made available as users request them.

Health Promotion On-line also offers quick key word search capabilities, allowing you to find words, phrases, names and dates anywhere on the system, literally within seconds. Future plans call for HPO to combine this capability with a visual database where you'll be able to view graphs, charts, complex tables and photographs.

When you join a topic area (e.g., Tobacco or Workplace Health), HPO's user-friendly E-mail section enables you to write directly to the responsible unit or join an open forum. Here, you can communicate with other users, network, ask questions, exchange ideas and disseminate information. For example, by joining the calendar of events area you can either read the date file or leave your own public notice of an upcoming conference or workshop in the E-mail section.

With its client-centred approach, the Directorate is striving to add value to a system that you'll want to connect with again and again.

Join the new electronic community!

For general information call (613) 954-3355 or fax (613) 990-7097.

For support, contact Roger Casselman at (613) 952-5831. The Health Promotion Online number is (613) 941-2806.



New Infection Control Handbook Now Available

The Canadian Standards Association (CSA) recently released a new publication entitled, the *Handbook on Infection Control — Plus 1112. Plus 1112* provides practical infection-control methods. The Handbook focuses on using resources effectively, eliminating inappropriate and wasteful methods and is written in clear, straightforward language for readers with technical or non-technical backgrounds. It is designed to help improve client care, reduce risks to staff and lower expenses. For more details on how you can obtain a copy of this handbook contact Karin Everist at (416) 747-4238.



PERIO POWERDONTICS™

EMPOWERING HYGIENE DEVELOPMENT

TEL: (416) 218-5575

One of the Nation's Leaders in Hygiene Development

TRANSFORM HYGIENE PERFORMANCE IN YOUR DENTAL PRACTICE

Start the process now with:

- Customized Soft Tissue Management Programs Implemented into your Practice with One-on-One Training
- Excellence in Diagnosing and Performing Periodontal Therapeutics of the 1990's
- Professional One-on-One Training in Advanced Clinical Skill Refinement
- Positioning Leading Edge Hygiene Technologies into Practice (i.e. Chemical Irrigation, Piezo Scaling, etc.)
- Motivated Team Players, and Increased Patient Acceptance through Empowering your Communication Skills.



PERIO POWERDONTICS™

Post Graduate Hygiene Education
Something For Every Hygienist

Is Dental Hygiene a Profession? A Literature Review

By/par :

Charla Lautar, BS, Dip DH, MEd, PhD

Y a-t-il une profession d'hygiéniste dentaire? Revue de la documentation

This article is the first in a four-part series. Dr. Lautar's PhD dissertation examined the process of professionalization of the dental hygiene profession from a sociological perspective. This article serves as an introduction to the research she conducted and provides a broad overview of some of the issues she addressed in her study.

*In the next issue of PROBE, an article discussing the process and results of a **focus group study** on the issue of the Professionalization of Dental Hygiene in Alberta will provide a concrete perspective of the process, as experienced in one Canadian province. The third article will continue to explore the theme with an article entitled, "Moving Towards the Professionalization of Dental Hygiene". In it Dr. Lautar explores the perceptions of Alberta dental hygienists and dentists regarding the status of dental hygiene as a profession. The final article in the series will discuss the role Continuing Education can play within a professional environment.*

Abstract

From a literature review of theories of professionalism, the historical development of the attributes of a profession are discussed. This paper then discusses various theories of professionalism and specifically examines the extent to which the criteria developed by Greenwood's model, which discusses certain attributes that a profession should possess, is selected to provide a broader model to analyze the current professional status of dental hygiene. Greenwood's model states that a profession has acquired: 1) systemic theory, 2) authority, 3) community sanction, 4) ethical codes, and 5) a culture. The author will conclude by suggesting possible steps the dental hygiene profession could continue to take to acquire these attributes and thereby recognition as a profession by other professions, governments and the public.



CHARLA LAUTAR
BS, Dip DH, MEd

Résumé

Le présent article traite des attributs d'une profession et de leur évolution à la lumière des théories dont fait état la documentation. Il a pour objet d'examiner les diverses théories échafaudées sur le caractère professionnel et de voir dans quelle mesure la profession d'hygiéniste dentaire répond aux critères établis par Greenwood. Il s'inspire du modèle Greenwood, qui examine certains des attributs que devrait avoir une profession, pour établir un modèle plus élargi en regard duquel on analysera le statut professionnel de l'hygiéniste dentaire. Le premier stipule qu'une profession doit avoir : 1) une théorie systématique, 2) une autorité, 3) l'approbation collective, 4) un code de déontologie et 5) une culture.

En conclusion, l'auteure suggère certaines étapes que la profession d'hygiéniste dentaire devrait songer à franchir pour acquérir ces attributs et obtenir ainsi, sur le plan professionnel, la reconnaissance des autres professions, des gouvernements et du public.

Introduction

Dental hygiene is undergoing the process of professionalization, that is, moving from the status of a semi-profession to a profession. Dental Hygiene has certain attributes that are required for being a profession, for example, the possession of specialized skills. However, other attributes, such as advanced university education and independence from the dental profession are still lacking. Greenwood's model (1957) states that a profession has acquired: 1) systemic theory, 2) authority, 3) community sanction, 4) ethical codes, and 5) a culture. The purposes of this paper are to discuss various theories of professionalism and to examine the extent to which the criteria developed by Greenwood are fulfilled by dental hygiene.

Development of the Professions

Professions have always been highly regarded by society. Traditionally, professionals were well-respected individuals because of their educational background. Historically, this education was a liberal university education in which Latin was the language of instruction. The four earliest professions were medicine, law, the ministry, and the military. University teaching later evolved from the ministry. Through these four core disciplines, and within a formal framework, universities grew and other occupations, some of which are presently considered professions, developed. Using dentistry as an example, "a profession acquired a body of knowledge and skill that rested upon basic sciences, professional education added theoretical to practical training and moved into the university" (Johnson, 1944, p.1182).

Individuals who were unable to obtain a higher level of education, such as craftsmen, were trained through apprenticeship. With the Industrial Revolution, a need for specialization developed. Eventually formal vocational training replaced the apprenticeship system allowing a wider range of occupations to come into existence. Although both professions and occupations required skill and knowledge, a major difference remained. That is, that professions required longer university education, whereas occupations required shorter non-university education, technical or vocational training, and most importantly, provided immediate employment opportunities (Harris, 1988, p. 220). A profession was considered a vocation, a calling to always be "on duty", whereas a non-professional was educated to perform a certain task. A professional was educated for life and retained the connection to the individual profession throughout life. For example, a physician was given the title Doctor in both professional life and personal life, and furthermore, was expected to treat and help anyone, at anytime, in any way even if the individual was not a regular patient.

Professionals were unique because they possessed knowledge and skills that other members of society did not have, or were unable to obtain. Consequently professionals created a special need for themselves in the community. As a result, they acquired a monopoly within society, which gave professionals power over the individual and society. This power was not only derived from education but also from the social class of the professional and the social class that the professional served. These views are still held today. Some individuals perceive the private practitioner as a higher-status professional than the practitioner who serves the public through an institution or government agency; these same individuals also tend to believe that a practitioner who has wealthy clients is somehow better than the practitioner who works in public service or treats clients from a lower social class.

When universities were initially established, it was, generally, only members of the upper classes who had access to university training. Individuals of lower class were hindered and prevented from gaining admittance to higher education, thus contributing to the maintenance of the upper class' privileges over the lower class. (*This is still true today when one compares the cost of dental education with the cost of dental hygiene education, the latter which is offered at both university and community settings.*) Dentists are perceived by some as members of a higher social class than dental hygienists. Furthermore, dental hygiene has been dominated by dentistry in both the employment and educational spheres. Later in the development of professions, social advancement or mobility could only be gained, either through entrance into a prestigious occupation, or through the collective effort of an organized occupation, to increase its status in prestige and power (Hughes, 1960, p. 56). Furthermore, as stated by Glaze (1974), "the wider range of courses of training for 'the new professions' which could be found in American universities has been regarded as one of several ways in which universities could adapt themselves to the needs of an affluent, 'science-based' society concerned for the welfare of all its members" (p. 346).

The growth of business and commerce and the increased need and demand for social services led to the emergence of new professions:

Two of the major influences on the growth of professions in the advanced industrial societies have been, first, the rise of corporate capitalism in place of the entrepreneur capitalism of the nineteenth century and, secondly, the emergence of the ideologies and institutions of liberal welfare policies which have been carried out by various twentieth-century governments. (Esland, 1980, p. 225)

Thus, there emerged a wide range and variety of "profession-like" occupations with scopes of practice ranging from banking to engineering to psychotherapy. Within these occupations a distinction was made for those who fell between the white-collar worker and the blue-collar worker. Traditionally, white-collar workers were administrators and therefore, considered professional, whereas, blue-collar workers utilized their technical skills and were not considered professional. With the evolution of the professions, technical skills are no longer performed exclusively by blue-collar workers, but by white-collar workers as well. These new or *emerging professionals*, however, are usually salaried employees and work for an organizational or institutional bureaucracy in which intellectual skills are used for profit. Furthermore, these marginal professions are neither high nor low on the two most important attributes of a profession — knowledge and service — but may be in the middle or high on one aspect and low on the other (Barber, 1965, p.22).



Dental hygiene, at one time considered an occupation based on technical skills, is now emerging as a profession. It has replaced limited task-oriented skills with functions that require further education, decision-making, judgment, synthesis and transfer of knowledge. In this way, dental hygiene has evolved from a technical occupation to a service and knowledge-oriented profession.

Theories of Professionalization

Many occupations strive to gain the attributes of a profession in an effort to attain a higher status. Larson (1979) states that movements towards professionalism are aimed both at market control and collective social mobility, and furthermore at monopoly — "monopoly of opportunities in a market of services or labor and, inseparably, monopoly of status and work privileges in an occupational hierarchy" (p. 609).

Perhaps the mostly widely accepted definition of a profession is Greenwood's (1957). He identified the following as attributes of a profession: 1) systemic theory, 2) authority, 3) community sanction, 4) code of ethics, and 5) a culture (Greenwood, 1957, p.45).

With respect to Greenwood's model, the emphasis is not so much on what defining attributes an occupation possesses, but rather, *the degree to which an occupation has the set criteria*. The true difference between a professional and a non-professional occupation is not a qualitative but a quantitative one (Greenwood, 1957, p.46). In other words, Greenwood requires that a profession fulfill a pre-determined set of criteria. If an occupation does not meet all criteria, it is not considered a profession. Greenwood's model or definition of a profession can be debated. The problem with this definition is that it does not take into account the degree of the qualitative attributes. For example, what type of education, which is one of Greenwood's specific attributes, constitutes systemic theory? Barber (1965) agreed with the attribute definition, but expanded the definition to include the relationship of the behavior to the attributes: "There is no absolute difference between professions and other kinds of occupational behavior, but only relative differences with respect to certain attributes common to all occupational behavior (p. 17). The difference then, between an occupation and a profession is not a specific attribute, since all occupations possess common attributes, but, perhaps, the manner in which the attribute was attained and the specifications of the attribute. Thus, a semi-profession is an occupation which exists along

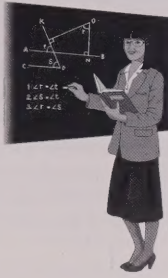
the continuum because either one or more of the attributes are missing or not fully developed (Toren, 1969, p. 144). In the process of acquiring and developing existing attributes, occupations become semi-professions, and semi-professions become professions.

Others have altered Greenwood's attributes, requirements or criteria of a profession. For example, Lieberman (1956) defines teaching as a profession based on its high service orientation attribute. Stuart (1988) regards nursing as a profession based on scientific theory independent of the medical profession. Jarvis (1983) provides even more specific criteria for defining a profession, such as, a full-fledged profession requires five years of training versus three years of training for a non-profession.

In Cervero's (1988) terms, these kinds of definitions are limiting because they follow a 'static approach' as opposed to a 'process approach' which views the development of a profession on a continuum. Cervero (1988) also discusses the socio-economic approach to professionalization which is based on occupational hierarchy. Professions are viewed as those occupations which monopolize and control services and labor, are based on professional authority, and are characterized by technical competence and specificity of function (Parsons, 1939, p. 460). Professionalization is, thus, an attempt to translate one order of scarce resources — special knowledge and skills — into another, social and economic rewards (Larson, 1977, xvii). The socio-economic approach also adopts Larson's (1979) view of professionalism referred to earlier in this paper, that is, monopoly of status and work privileges in an occupational hierarchy, with training as a social function. In this approach, a profession directly controls the growth of an occupation into a profession.

An example of dentistry curtailing the growth of dental hygiene can be observed in the use of supervision in the private practice setting where the majority of dental hygienists are employed. Three other examples are stated by MacLean (1987) in the history of dental hygiene in Alberta. First, in terms of education, a proposed dental hygiene program at Red Deer College "was not supported by the Alberta Dental Association and enough pressure was brought to bear that the proposal was not implemented" (p. 203) and the initiation of a dental hygiene program at the University of Alberta was opposed by the Alberta Dental Association, "the Board expressed the opinion that there was no need for Dental Hygienists in the province" (p. 199). Second, in regards to the employment of dental hygienists, "the employment came from the Public Health sector followed by acceptance of Dental Hygiene in the private practice sector" (p. 204). Third, the "legislation to regulate the licensing, registration and practice of dental hygiene was passed as a section of the Dental Association Act" (p. 199).

Included in the socio-economic approach is the "folk concept", that is, what the general public regards as a profession is a profession. Therefore, the recognition of professions would change with the era (historical time) and the locale (nation, state, province specific). "This approach contrasts dramatically with both static and process approaches in that it assumes there is no such thing as an ideal profession" (Cervero, 1988, p. 9). In other words, public opinion determines professional standards, that is, the degree to which services are required and respected (Geison, 1983; Freidson, 1959, 1984). These standards would fluctuate with the economy, the marketability of the services, and the wants, needs, and desires of the public and would influence what occupations would be considered professions and what professions would be considered occupations.



Another approach to defining a profession is to utilize specific government criteria. However, these criteria can be contradictory. For example, in the 1986 Statistics Canada Census, dental hygienists and dental assistants are grouped together (Statistics Canada, 1989), rather than considered separate occupations. Even though the Government of Alberta recognizes dental hygienists and dental assistants as distinct bodies, each self-regulating, the Government of Canada did not make this distinction.

Also, government criteria may change from year to year, obscuring the defining attributes of a profession. In the 1970's, the United States Census defined a profession based on education, income, and prestige (Ginzberg, 1979). In the 1980 United States Census, professionals were categorized with the managerial. The technical workers were moved into the "sales and administrative support" category (U. S. Employment Service, 1991). As Friedson (1986) argues, the criteria and categorizations may be arbitrary. In the new class theory, for example, higher education becomes a more important attribute than specialized knowledge and skill in defining a profession. He proposes "that for an occupation to be classified as a profession, some amount of higher education must be a prerequisite to employment" (p. 59).

An example of a government deciding which occupations are to be given professional status is the l'Office des professions du Quebec, an organization created by the National Assembly of Quebec. In Quebec, the definition of a profession is straightforward. A profession is an occupation that was given status through the "Professional Code" adopted by the Provincial Government in 1973. At that time, the government recognized thirty-eight professional corporations, and since then, other occupations have applied to the Board. The professional corporations were created to protect the consumer. The function of professional associations, however, is to protect and promote the profession. When an occupation is given corporation status in Quebec, the members of that profession are granted the right of self-regulation. In other words, the right to practice specific functions comes from the corporation itself rather than another profession: "it is only by incorporating a professional group into a professional corporation that the autonomy and authority of members of the group in a field of activity are recognized by law (Dufrense et al, 1979, p. 25).

The role the government plays in determining what is a profession may ensure professional status in some respects, for example, self-regulation, but may not encompass all the professional criteria that professional bodies may need to obtain full recognition as professionals. For example, dental hygienists in Alberta, British Columbia, Ontario and Quebec have been granted self-regulation, but they still do not collect their own fees for dental hygiene services. In this respect, dental hygienists need to be considered by the consumer, the government, and the insurance companies as the primary care providers performing the dental hygiene services. This would lessen one aspect of the financial and monopolistic control dentistry has on dental hygiene.

A more recent definition of a profession is proposed by Abbott (1988). In his discussion of the professions, Abbott considers the jurisdiction of tasks rather than defining a profession with a set of criteria. He says jurisdiction, the specialization and delegation of tasks acquired through knowledge, gives power and prestige to an occupation. Protecting the jurisdiction through legitimation, research and instruction gives foundation to this knowledge. Not only does jurisdiction allow the monopoly of activities, but also the control of both payment and the work setting, including the division of labor.

The Development of Dental Hygiene as a Profession

This paper uses the attribute model of Greenwood (1957) for defining a profession for two main reasons. First, Greenwood's view provides a range of basic criteria that are supposed to be possessed by any profession, whether established or developing. Second, Greenwood's approach is pluralistic, that is, it assigns no specific significance to a single criterion or attribute. By contrast, other models such as Abbott's (1988) model of professions emphasizes jurisdiction as the most important single criterion of professionalism. Such a model can be successful in exploring more established professions which have acquired considerable control and power. But developing professions, like dental hygiene, may lack jurisdiction. This is why a broader model would be more helpful in the study of developing professions.

Dental hygiene is beginning to gain the attributes that Greenwood (1957) specifies as inherent to a profession. As referred earlier in this paper, Greenwood's model states that a profession has acquired: 1) systemic theory, 2) authority, 3) community sanction, 4) ethical codes, and 5) a culture. Dental hygiene does possess a systemic theory, and specialized knowledge and skill (Walsh, 1991). This knowledge and skill is acquired through education at the post-secondary level either through college or university settings. There are differences between these two educational settings. Basic clinical skills are taught in the diploma dental hygiene program, which prepare the graduate for private practice. The baccalaureate degree places emphasis on advanced clinical skills, research, public health, education, and administration, which are considered entry level into non-traditional positions or expanded careers in dental hygiene (Metzger & Forrest, 1980; Wayman, 1985; Rubinstein & Brand, 1986; Pohlak, 1987). Feller's (1982) research survey study of Western Canada, which included British Columbia, Alberta, Saskatchewan, Manitoba, and North-Western Ontario, recommended a baccalaureate degree in dental hygiene as a prerequisite for non-traditional employment settings.

Dental hygiene theory is becoming even more specialized. Degrees are offered at the baccalaureate level in both the United States and Canada; currently a master's degree in dental hygiene is offered only in the United States. Graduates of community college dental hygiene

programs maintain a competence that is not possessed by other members of the dental team (e.g., assistants and dentists) in the area of dental hygiene. For example, dental hygienists have more training and knowledge in scaling and root planing than do dentists and more training and knowledge in polishing than dental assistants. The systemic theory of dental hygiene encompasses skill based on knowledge, that is, a dental

hygienist not only knows how to root plane, the skill, but, also understands the scientific theory, rationale, indications and contraindications of root planing, the knowledge. Professional judgment is based on a synthesis of this skill and knowledge. The basic dental hygiene curriculum is comprehensive including both specialized and broad knowledge to prepare the dental hygienist for entry into practice. The dental hygienist is primarily recognized as possessing a distinct expert role in preventative dental treatment (Darby, 1983).

Although baccalaureate degrees seem to advance professionalism by creating careers that allow advancement, career options, and independence from the supervision of the dental profession, these

opportunities are presently not available in any great number for degree dental hygienists (Kraemer, 1985; Wayman, 1985; Rubinstein & Brand, 1986). Also, these non-traditional positions are, and have been, filled by diploma dental hygienists who seem to be capable and meet the approval of their employers (Feller, 1982, p. 21). The same is true in the United States; of those American dental hygienists working in hospital settings, less than one-third possess baccalaureate degrees. In these settings, the educational preparation is viewed as no different than other non-traditional positions, and the dental hygienist basically works as a clinician (Cirincione & Wils, 1990, p.243). The dental office remains the dominant employment setting for the dental hygienist educated for the non-traditional workplace both in the United States and Canada (Hunter & Rossman, 1979, p.559; Johnson, 1989).

Greenwood's second attribute of a profession is that it possess authority. Authority can be interpreted as trust. Thus, the professional authority is a client-professional relationship (Greenwood, 1957, p.48). Clients trust that the information given by the professional is correct and that his/her services are required and provided in the proper manner. This trust would apply to dental hygienists when they have full authority. The dental hygienist is delegated a degree of authority based upon the dental hygienist's skill and knowledge. Dentists, through employment of dental hygienists, utilize and trust them to provide dental hygiene services to clients; and, the clients, through seeking treatment by dental hygienists, recognize and trust their ability to provide these services.

The dental hygienist is primarily responsible for preventive oral health care and, according to Parson's (1939) criteria of a professional, possess superior "technical competence" and limited "specificity of function" (p. 460). In the traditional practice setting, that is, the private dental practice, the client receives specialized treatment from the dental hygienist. However, since a dentist usually employs and in some cases supervises the dental hygienist to render this treatment, another professional possesses the ultimate authority. Thus, the professional authority is a client-professional relationship (Greenwood, 1957, p. 48).

In Canada, dental hygienists do not possess authority because of legislation and regulations that describe supervision. In 1984, the Canadian Dental Hygienists' Association defined three categories of supervision: direct, indirect, and general. The basic difference between direct and indirect supervision is that a dentist is physically present in the dental setting with direct supervision and not physically present with indirect supervision. In both direct and indirect supervision, the dentist makes the diagnosis, whereas in general supervision, the dentist does not necessarily diagnose (Health & Welfare Canada, 1988). Recent changes in the regulation of dental hygienists have altered this definition. For example, in British Columbia the College of Dental Hygienists will designate which care facilities (i.e. hospital or other facility that provides residential care to persons unable to readily access dental services in the community) may hire dental hygienists to work without the general direction of a dentist (Brodie, 1994; Regulated Health Professions Act, 1994). In Ontario, recent regulations state that dental hygienists "receive an order from a dentist to perform, without regulatory supervision, one of the authorized acts of dental hygiene" (The New Working Relationship", 1993, p. 7). There is a "distinction between the regulatory supervision associated with delegated acts and the institutional supervisory function that dentists and others perform as employers, or as supervisors in an institutional hierarchy" (p.6).



Greenwood's third attribute, community sanction of authority, is limited in dental hygiene. According to Greenwood, community sanction involves sanction by the client, the public, the government, educational institutions and professional associations. First, the dental hygienist, in most cases, is practising under the supervision of another profession, the dental profession. Second, in some provinces a dental board or association grants the certificate to practice, not the dental hygiene organization. Third, dental hygiene bodies do not accredit dental hygiene educational programs. However, through present legislation, some dental hygiene regulatory bodies have control over education and can accept or reject the present accreditation system.

The Commission on Dental Accreditation of Canada is an autonomous body that accredits all dental education programs in Canada. The Board that reviews the reports has a dental hygienist member, and dental hygienists are members of the accreditation teams that accredit dental hygiene programs. However the majority of the input from this Commission does not come from dental hygienists.

Fourth, in many instances, the local educational institution controls entry into dental hygiene; in essence, the government sets the pre-requisites and admission standards into dental hygiene educational programs. Fifth, dental hygienists perform services and develop informal treatment plans based on their professional judgment of the needs of clients, but it is the dentist who is responsible for all treatment activities within the dental setting, including diagnosis and the formal treatment plans. Sixth, not all the personnel who perform specific dental hygiene functions are licensed as dental hygienists. For example, in Quebec dental hygienists have a "reserve title" which means only those who are members of the professional corporation of dental hygienists and, therefore, licensed dental hygienists, can take this title. This could mean that another person, perhaps not qualified in all dental hygiene functions, could perform these functions and yet not be practising illegally because the title "dental hygienist" was not used. This is why professions prefer to have the "exclusive right to practice" (Evolution, 1976, p. 9). The practice of unqualified individuals performing dental hygiene functions occurs not only in Quebec, but throughout North America where provincial and state laws are not strictly monitored and enforced. One could then surmise that dental hygiene has not been granted full privileges and power by the community.

Yet dental hygienists do have certain privileges. These privileges include confidential communication with the client and performance evaluation by peers, which is often an aspect of licensing criteria. As society becomes more aware of the dental hygienist's specialized skill, the services will become more valued by society in general. Furthermore, dental hygienists are presently seeking authority in their own right by no longer referring to themselves as auxiliaries to the dental profession, but colleagues and co-therapists in client treatment (Darby, 1983).

According to Greenwood, a profession not only requires community sanction but must also possess a code of ethics. He maintains that an important aspect of this ethical code is that service is provided to all. Dental hygienists do sanction universal service as part of their code of ethics which was updated by the Canadian Dental Hygienists' Association (1992).

The last attribute of a profession Greenwood requires is that it possess a professional culture which he defines as "a network of formal and informal groups" (p. 51). The formal culture of dental hygiene includes both private and alternative practice settings,

educational centers and professional associations. Dental hygiene does possess values, norms, and symbols as part of its professional culture. The dental hygienist is a specialist who is committed to helping people maintain oral health as a means of promoting total health care. Norms of behavior are acquired throughout education and in the employment setting. Dental hygienists are employed full-time and remain in the workforce longer (Darby, 1983; Scranton & Gurenlian, 1985; Johnson, 1990). This reflects a long-term commitment, which is more characteristic of a profession than an occupation. This development suggests that dental hygiene is moving towards full professional status.

In June 1992, the Canadian Dental Hygienists' Association published a position statement which outlined practice guidelines that advocate collaborative practice between dental hygienists and other health care professionals: ***The dental hygiene profession promotes access to affordable oral health care through alternative practice arrangements and non-traditional work-settings.*** ("Management of Dental Care", 1992). By moving into non-traditional settings (e.g., nursing homes, long-term care facilities), dental hygienists are entering employment settings that no longer involve supervision, and, in this way, are also broadening their scope of practice and gaining more autonomy. Although the Canadian Dental Hygienists' Association establishes general guidelines such as these, each provincial association is ultimately responsible for both the development and the implementation of these guidelines and may place restrictions on them.

Conclusions

From the above discussion, it could be concluded that dental hygiene presently has some attributes of a profession and is moving toward recognition as a profession. It is proposed that in order for dental hygiene to attain full status as a profession, two steps are required. First, dental hygienists themselves should desire this status. It is essential that dental hygienists be determined to undertake further steps toward achieving full status as a profession. No tangible change is obtainable without this determination. Second, dental hygienists should establish their own jurisdiction. It is true that dental hygienists have acquired self-regulation in some provinces; however, self-regulation alone can not establish jurisdiction. Among other things, dental hygiene needs to establish an interdependence with dentistry, and a greater participation in the establishment of dental hygiene programs. When dental hygienists have power and authority over their professional affairs, there will be less need for supervision by the dental profession. The dental hygienist will no longer be perceived in society as an individual working for a dentist, but as an independent provider of health care who collaborates with members of the dental profession as well as other health professions.

References

- Abbott, A. (1988). *The system of professions: An essay on the division of expert labor*. Chicago: The University of Chicago Press.
- Barber, B. (1965). Some problems in the sociology of the professions. In K.S. Lynn (Ed), *The professions in America* (pp. 15-34). Boston: Houghton Mifflin.
- Brodie, A. (1994). Update: College of Dental Hygienists. British Columbia Dental Hygienists' Association, Vancouver (May 5, 1994).
- Canadian Dental Hygienists' Association. (1992). *Code of ethics*. Ottawa, Ontario: Canadian Dental Hygienists' Association.
- Cervero, R. M. (1988). *Effective continuing education for professions*. San Francisco: Jossey-Bass.

Cirincione, U. K. & Wils, W.J. (1990). Survey of dental hygienists in the hospital setting. *Journal of Dental Hygiene*, June, 239-245.

Darby, M. L. (1983). Collaborative practice model: The future of dental hygiene. *Journal of Dental Education*, 49(9), 589-593.

Dufrense, J., Mongeau, Y., Proulx, S., Syvestre, R. (Eds.). (1979). *The professions: Their growth or decline?* Montreal: Societe de publication Critere, Inc.

Emphasis: Annual Session. (1985). *Journal of the American Dental Association*, 111, December, 914-918.

Esland, G. (1980). Professions and professionalism. In G. Esland and G. Salaman (Eds.), *The politics of work and occupations* (pp. 213-250). Milton Keynes, England: The Open University Press.

The evolution of professionalism in Quebec. (1976). Quebec: Office des professions du Quebec.

Feller, S. (1983). Assessing manpower demand and desired skills for degree graduates in dental hygiene. Winnipeg, Manitoba: University of Manitoba, School of Dental Hygiene.

Freidson, E. (1959). Specialties without roots: The utilization of new services. *Human Organization*, 18(3), 112-116.

Freidson, E. (1984). The changing nature of professional control. *Annual Review of Sociology*, 10, 1-20.

Freidson, E. (1986). *Professional powers: A study of the institutionalization of formal knowledge*. Chicago: The University of Chicago Press.

Geison, G. L. (1983). *Professions and professional ideologies in America*. Chapel Hill: The University of North Carolina Press.

Ginzberg, E. (1979). The professionalization of the U. S. labor force. *Scientific American*, 240(3), 48-53.

Glaze, N. (1974). The schools of the minor professions. *Minerva*, 12(3), 346-364.

Greenwood, E. (1957). Attributes of a profession. *Social Work*, 2(3), 45-55.

Harris, D. (Ed.). (1988). *Education for the new technologies*. New York: Nichols Publishing Company.

Health and Welfare Canada. (1988). *The practice of dental hygiene in Canada: Description, guidelines and recommendations*. (Cat. No. H34-44/1-1988E). Ottawa, Ontario: Minister of Supply and Services Canada.

Huges, E. C. (1960). The professions in society. *Canadian Journal of Economics and Political Science*, 26(1), 54-61.

Hunter, E. L. & Rossman, P. P. (1979). Baccalaureate dental hygiene graduates' assessment of dental office employment. *Dental Hygiene*, October, 559-564.

Jarvis, P. (1983). *Professional education*. London, England: Croom Helm.

Johnson, A. (1944). Professional standards and how they are attained. *Journal of American Dental Association*, 31(September), 1181-1189.

Johnson, P. M. (1989). *Dental hygienists in Canada: Descriptive profile of labour force behavior*. Doctoral dissertation, University of Toronto.

Kraemer, L. G. (1985). The dental hygiene entry dilemma: An issue of prestige, image and professional credibility. *Dental Hygiene*, 59(3), 117-120.

Larson, M. S. (1977). *The rise of professionalism: A sociological analysis*. Berkeley: University of California Press.

Larson, M. S. (1979). Professionalism: Rise and fall. *International Journal of Health Services*, 9(4), 607-627.

Lieberman, M. (1956). *Education as a profession*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

MacLean, H. R. (1987). *History of dentistry in Alberta: 1880-1980*. Edmonton: University of Alberta Printing Services.

Management of dental care: CDHA position statement June 1992. (1992). *The Canadian Dental Hygienists' Journal/Probe*, 26(3), 100.

Metzger, C. T. & Forrest, J. L. (1980). Career preparation role of baccalaureate dental hygiene programs. *Dental Hygiene*, June, 25-27.

The New Working Relationships Between Dental Hygienists and Other Practitioners. (1993). Toronto: The College of Dental Hygienists of Ontario.

Parsons, T. (1939). The professions and social structure. *Social Forces*, 17(4), 457-467.

Pohlak, M. (1987). The impact of ten years on B.Sc.D. (DH) graduates of Canadian dental hygiene. *Journal of the Canadian Dental Hygienists' Association/Probe*, 21(3), 116-118.

Regulated Health Professions Act. (1994, January). Statutes of Ontario, 1991, Chapter 18, as amended by: 1993, Chapter 37. Toronto: Queen's Printer for Ontario.

Rubinstein, L. & Brand, M. (1986). A description of postcertificate dental hygiene programs. *Journal of Dental Education*, 50(10), 608-610.

Scraanton, J. G. & Gurenlian, J. R. (1985). A model of two-year and baccalaureate dental hygiene programs. *Dental Hygiene*, 49(2), 95-99.

Statistics Canada. (1989). *Canadians and their occupations: A profile*. (Cat. No. 93-157). Ottawa, Ontario: Minister of Supply and Services Canada.

Stuart, M. E. (1988). Achieving doctoral preparation: A Canadian analysis of barriers and facilitators. *Journal of Continuing Education in Nursing*, 19(1), 17-19.

Toren, N. (1969). Semi-professionalism and social work: A theoretical perspective. In A. Etzioni (Ed.), *The semi-professions and their organizations* (pp. 141-195). New York: The Free Press.

United States Employment Service. (1991). *Dictionary of occupational titles: Vol. 1* (4th Ed.). Washington, D. C. (U.S. Department of Labor).

Walsh, M. M. (1991). Theory development in dental hygiene. *The Canadian Dental Hygienists' Journal/Probe*, 25(1), 12-18.

Wayman, E. E. (1985). Baccalaureate dental hygiene education: Creating a reality. *Journal of Dental Education*, 49(3), 136-138.

Charla Lautar graduated in Dental Hygiene from Ohio State University in 1971. In 1993 she obtained a doctorate in Educational Policy and Administrative Studies. Her dissertation is entitled "The Status of Dental Hygiene as a Profession: Perceptions of Dental Hygienists and Dentist in Alberta". Dr. Lautar's career has focused primarily in teaching dental hygiene. She has also been involved in periodontal research, in community health, and in a variety of private practice settings. She is an active member of both CDHA and ADHA and is currently a CDHA Director representing Alberta and sitting on the Professional Development Council.

PerioREPORTS

Bimonthly publication which summarizes periodontal research of specific interest to clinicians. Easy to read format keeps you up to date on the latest research findings. Journals reviewed for **Perio REPORTS** include:

Journal of Periodontology
Journal of Clinical Periodontology
Journal of Periodontal Research
Journal of Dental Research
Periodontal Abstracts
Quintessence International
J of Periodontics and Restorative Dent
JADA, JADHA
and many more



Please send sample issue for my review



\$48 one-year



\$84 two-year

Name _____

Address _____

City _____

Prov _____

Postal Code _____

Mail to: Perio REPORTS
Box 52090, 311 - 16th Ave. NE
Calgary, Alberta, T2E 8K9

News From Schools

News From Schools is an annual feature published in the July/August issue of PROBE. It is designed to provide educators with an opportunity to share their successes and new ideas, while giving CDHA members an opportunity to learn where some of their colleagues are and how dental hygiene programs are changing to meet the challenges the profession will face in the future. This year, of 29 dental hygiene programs offering programs and invited to submit a report, nine did not: Canadore College in North Bay, ON, Fanshawe College in London, ON, Georgian College in Orillia, ON, Cégep de Saint-Hyacinthe in St-Hyacinthe, QC, Cégep Maisonneuve in Montréal, QC, Cité des jeunes in Hull, QC, Cégep F.X. Garneau in Québec, QC, Cégep Édouard-Montpetit in Longueuil, QC, and Cégep de Trois-Rivières in Trois-Rivières, QC.



Camosun College Victoria, BC

Camosun's Dental Hygiene Program accepted 26 students in the fall of 1994. Twenty-one students were enrolled in the second year class. Externship programs were initiated at the Vancouver Island Cancer Centre for the second year students. They also conducted interviews for an action research project being undertaken by UBC Dental Hygiene Degree Completion students. The purpose of the study is to determine college students, the working poor and seniors' attitudes toward dental and dental hygiene care. The results were presented at the CDHA Annual Professional Conference held in Halifax in June and a summary of the study is to be submitted to *PROBE* for future publication.

This year's graduating students were licensed by the new College of Dental Hygienists of British Columbia (CDHBC). A 1994 Camosun College graduate is a member of the College's Board.

The first year students conducted their first scientific literature reviews. Many have expressed an interest in alternative practice settings and seem to understand their responsibility to initiate these new positions.

Camosun College completed a provincially-funded project to study the feasibility of bridging from dental assisting to dental hygiene. The recommendations indicate that a bridge is not feasible. However, it suggests that all three dental hygiene programs in the province should initiate mechanisms such as prior learning

assessments or coring of some courses to give credit for previous learning. A complete set of the recommendations is available through the Centre for Curriculum Development or the Camosun College Dental Hygiene Program.

College of New Caledonia Prince George, BC

The College of New Caledonia's division of Dental Studies has had a busy and interesting year. It lost its Division Chair, Fran Richardson to the College of Dental Hygienists of Ontario. The new Division Chair, Melba Holm, hails from Nova Scotia. There were a total of 65 students this year, including dental assisting, and first and second year dental hygiene students.

The second year dental hygiene students graduated on June 3. They are the first class to be registered by the College of Dental Hygienists of BC. The College's first year students enjoyed their first trimester of regularly scheduled clients.

This year's students participated in many community events throughout the year and were involved in community activities during both Dental Hygiene Week and Dental Health Month.

The College's dental faculty have been busy in activities beyond teaching. CNC's new Education Council Chair, Nancy Tarrant, is a Dental Studies faculty member; Carole Wellwood, one of the dental faculty is a new member on the CNC College Board; CDHA Director, Patricia Noble is a member of the College's dental faculty and faculty member Kerri McCaig is on the Board of the College of Dental Hygienists of BC.

The second year dental hygiene students and several of the College's dental faculty attended the Fédération Dentaire Internationale World Dental Congress held in Vancouver in October 1994 and some faculty members also participated in CDHA's 6th Annual Professional Conference held in Halifax, June 23-25.

Vancouver Community College Vancouver, BC

The 1994/95 academic year brought some changes to the VCC Dental Hygiene Faculty. After seven years as Department Head, Susanne Sunell began a one-year leave to complete a Masters in Arts in Higher Education at the University of British Columbia. Lynn Smith was elected the Department Head and took over responsibilities in July 1995. Linda Maschak

was also on a one-year leave for personal and professional development. However, Pat Robertson returned to the college on a full-time basis after completing a Bachelor in Science Degree at UBC. Two new part-time instructors also joined the VCC Dental Hygiene Faculty in the fall of 1995, Susan Schmitz and Nancy Keselyak.

A number of faculty members have been busy with their educational endeavours. Dianne Stojak completed her Bachelors degree in Adult Education through the joint program of VCC and the University of Alberta, and Tricia Hughes continues her studies in the same program. Keith Milton also continues his doctorate work at UBC's Faculty of Medicine. Busy providing Continuing Education throughout the lower mainland and Washington State, Ginny Cathcart, has delivered presentations on fluorides, antimicrobial agents and treatment planning. VCC's microbiologist, Lexie Martin, has presented sessions on "The Role of Bacteria and the Immune Response in Periodontal Disease" and Ruth Lunn has delivered sessions on local anaesthesia and care of cancer patients.

Many faculty members attended the FDI World Dental Congress held in Vancouver in October 1994. Pat Robertson and Lynn Smith presented a Dental Radiography seminar and Susanne Sunell exhibited a table clinic on balanced posture for dentistry. The students also attended the congress for two days and enjoyed having an opportunity to participate in the international presentations and view the exhibits.

The College has completed its first stage for a 'faculty exchange' with a program in Sweden. Kirsten Ohm visited VCC for a week in October and then Susanne Sunell ventured to Sweden in December to continue the planning for a possible 6-week exchange in the fall of 1995 if funding can be completed. The programs were found to be remarkably similar.

The new intake of VCC students reflects the College's revised admission process to focus on GPA related to first year university courses and the CDA interview and no longer give points for additional years of education and experience as health care providers. It was felt that this would allow access to a wider number of target groups. It would appear that this change has provided the program with an overall younger class with varied backgrounds. A large number of these students indicated they would like to pursue degree completion programs.

The annual 'Ethical Reasoning Development' seminars of the senior Dental Hygiene and fourth

year Dentistry students were expanded to include discussion regarding management of a given situation through effective professional communication. Use of standardized client/subjects (professional actors) who re-enacted situations with one student participating at a time in small groups was extremely powerful. This new format made the written ethical dilemmas come to life.

In response to requests for more information on each other's roles, from Dental Hygiene and Dentistry students, a focus group seminar was held. In March, the senior Dental Hygiene and Dentistry students came together in small groups to examine issues related to collaborative practice, management strategies, team development and enhanced their knowledge regarding each other's professional roles.

In April, faculty, students and a representative from administration were involved in the department's annual strategic planning session. The group identified key issues to focus on in the coming year and through this process have identified a need to revise the curriculum to meet the demands for increased access to care, alternate delivery systems and rapidly changing technology. With the new CDHA Practice Standards the group felt the curriculum needs to reflect and balance the numerous roles of the dental hygienist. Of equal importance is the self-regulation status of dental hygienists in BC. The Department is applying to the provincial government for funding, through the Centre for Curriculum and Professional Development, and looking at other creative ways to make it happen.

University of British Columbia Vancouver, BC

Bonnie Craig, Director of the University of British Columbia's Dental Hygiene Degree Completion Program reports that the degree program has just finished its third year of operation. The initial enrollment in September 1992 of five dental hygienists has increased to 13. Most students are studying part-time and have up to five years to complete their requirements. Nine students access the program from out-of-town using distance education courses, teleconferences, faxes, audio tapes and/or commuting.

UBC's Faculty of Dentistry offers a Master of Science in Dental Science Program to qualified dental hygienists with a Bachelor's degree (the degree does not have to be in dental hygiene). Lynn Guest (UBC '75) is completing her thesis on "Does Oral Health Influence Quality of Life for Older Adults?" and Shafik Dharamsi (Georgia '93) is conducting research for his thesis on "The Educator's Perspective of Role Change During A Curricular Transition: Mapping Experiences". Both Lynn's and Shafik's research is qualitative rather than quantitative in nature.

Two full-time students, Terri-Lynne Martin (U of M '91) and Debbie McCloy (UBC '84) received their Bachelor of Dental Science degrees at

Convocation held June 2, bringing the total number of program graduates to five. Both Terri-Lynne and Debbie have excelled in their academic pursuits and been exemplary role models for Dental Hygiene in the Faculty of Dentistry earning the respect and admiration of faculty, undergraduate dental students and graduate periodontic students. Debbie McCloy will begin studies in the Master's Program this September and Bonnie Craig will chair Debbie's thesis committee.

Three part-time students, Rita Chu (UBC '75), Barbara Drewry (UBC '72) and Jo Gardner (U of Oregon '47), have accumulated enough course credits to be promoted to the fourth year of the program. Mary-Lou Burleigh (VCC '90), Mary Findlay (UBC '71), Carolyn King (VCC '92) and Karen Martell-MacDonald (Dal '91) are continuing their studies in third year. New registrants this year in third year included Leanne Adkin (Camosun '91), Lisa Enns (UBC '83), Sue Hamel (Camosun '91) and Linda Talbot (VCC '90). The program's students are part of a dedicated and hardworking group of professionals. They consistently earn top grades in all courses taken with the dental and periodontics students!

A highlight this year, was a joint seminar at UBC for the dental hygiene degree students, the senior dental hygiene students from Vancouver Community College (VCC) and their Professional Issues course instructor, Ginny Cathcart. Shirley Bassett, part-time UBC faculty, conducted the seminar on Dental Hygiene Regulation, a topic from the Current Issues in Oral Health Sciences course. Both UBC and VCC found this to be an exciting way to bring the degree and diploma students together and it is anticipated that this will lead to more joint activities in the future. For the second time, a UBC degree student whose focus of study was Allied Dental Education, had the opportunity to spend time observing and practice teaching at Vancouver Community College's Dental Hygiene Program. This proved to be a valuable learning experience for this student and another way of linking the two programs.



University of Alberta Edmonton, AB

1994 was another year of uncertainty for the University of Alberta. Throughout the year the question was, would the dentistry program survive and where would the dental hygiene program be accommodated? All of these questions were answered when an announcement was made in January (1995) that the dentistry and dental hygiene programs would remain at the University of Alberta and that the Dental Faculty would be amalgamated with the Faculty of Medicine.

At the present time, a Subcommittee comprising members of the Faculties of Dentistry and Medicine are developing the strategic plans for the merger that is to occur in 1996.

The dental hygiene program has proposed that a pre-professional year be added and are anticipating that this will be in place by 1997. Work on the baccalaureate degree still continues.

This year, 65 students were admitted to the first year class and 62 exceptional students will graduate. The University welcomed eight new part-time staff members to its dental hygiene program: Karima Bapoo-Mohamed, Dr. Elizabeth Burgess, Marion Kaiser, Nina Kuyt, Heather Laing, Christine Martinello, Michele Moroz and Rena Schafers. The dental hygiene faculty extend its congratulations to one part-time staff member, Laura Mowat, who was promoted to Clinical Assistant Professor.



Saskatchewan Institute of Applied Science & Technology Regina, SK

June 1994 was a very busy time for faculty and students. Saskatchewan hosted the 5th Annual CDHA Professional Conference and many faculty members were involved in the planning and delivery of the event.

On September 1, 1994, for the first time ever, 24 students registered for Year 1 of the school's two-year direct-entry program. In addition, 34 students enrolled in the last offering of SIAST's Dental Hygiene II Program (for dental therapists and certified dental assistants). Seven of the students in the Dental Hygiene II Program were enrolled through a training contract with the Manitoba and Federal governments. SIAST's diligent and committed faculty and staff members played a large part in making this year a successful one for all its students.

To prepare students to become contributing members of Canada's evolving health care system, full-time faculty member, Brenda Udahl, moved her classroom out into the community. As part of their Community Oral Health course, students present table clinics and deliver oral health information sessions to (i) the Balfour Collegiate Special Tutorial Class — for pregnant

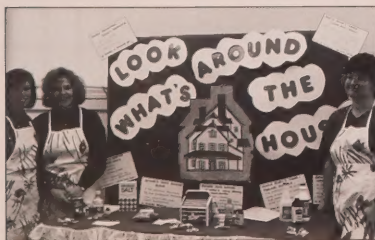


Wascana Institute, SIAST Dental Hygiene student providing oral hygiene services to a resident of Mutchmor Lodge, in his room.

teenagers (ii) the Cosmopolitan Activity Centre — for mentally and physically challenged individuals (Part-time faculty member Charlene Hamill facilitates this project.) (iii) the Regina Home and Garden Show — Health Section (iv) various Brownie and Girl Guide groups (v) the Wascana Institute Health Lifestyles Day (vi) Adult Basic Education and English as a Second Language classes (vii) the Dental Health Month "Free Advice" day and, (viii) the College of Dentistry students at the University of Saskatchewan.

SIAST's clinic has also made the "community move". Every Friday, from January until April, Brenda takes two (one in the morning and one in the afternoon) clinical student groups to Mutchmor Lodge, a local senior citizens residence. Faculty dentists screen the residents each year and SIAST dental hygiene and dental assisting students provide dental hygiene care in the on-site single chair operator and/or in the residents' rooms. This project has been taking place for four years and the dental hygiene students have become an integral part of the "Mutchmor community". The resident's Director of Care has advised SIAST that there has been a significant decrease in the number of upper respiratory tract infections experienced by the residents since the program was initiated and she feels this is due, in no small part, to the increased healthy state of the residents' mouths.

As part of their Dental Materials course, SIAST's dental hygiene graduates and faculty were able to take part in a two-day Dental Implant Workshop facilitated by Leanne Carlson-Mann and Nobelpharma representatives. Leanne, a graduate of the SIAST dental hygiene program, and a regular *PROBE* contributor, has been delivering the dental implant portion of the Dental Materials course for many years. However, this is only the second time Nobelpharma have been involved. The second day of the program is a hands-on lab using equipment supplied by Nobelpharma. Students are walked through a complete dental implant procedure, they are introduced to the various implant components and learn how they are used and how they fit together. Upon completion of the workshop, participants obtain a Branemark System Certificate from Nobelpharma. SIAST Dental Hygiene Program Head Noel Selinger says they feel privileged to be the only dental hygiene program in Canada to be able to offer this learning experience to dental hygiene students.



SIAST dental hygiene students and their table clinic about home oral health products.



University of Manitoba — School of Dental Hygiene Winnipeg, MB

Twenty-six students enrolled in the first year of the Dental Hygiene program for 94-95, while twenty-eight students continued in the second year program.

A minor curriculum review was completed in the School during the past year.

This past year, senior dental hygiene students participated in an integrated practice clinic with senior dental students. The purpose of the program is to teach students about each others professional roles and scope of practice by simulating the private practice setting. Dental hygiene students also work with dental students in a pedodontic/dental hygiene clinic.

This year's dental hygiene students participated in externships on a mobile dental van, at an institution for the mentally and physically handicapped, at a community health centre, and in a municipal dental program in Winnipeg. During CDHA's National Dental Hygiene Campaign, senior students conducted oral health wellness programs at several local workplaces (Manitoba Telephone System, Great West Life Insurance and Health Sciences Centre General Hospital), while junior students prepared written scripts, on health topics, for a local "health telephone line" program.

Ms. Michele Ediger, Dental Hygiene II student, was awarded the 1994 AquaFresh Student Scholarship, provided through the Canadian Dental Hygienists Association for her published work on eating disorders and oral health. Ms. Ediger was presented with this award at CDHA's Annual Professional Conference held in Saskatoon, June 17-19, 1994.

Professor Margery (Marnie) Grace Elaine Forgay resigned from the School of Dental Hygiene on August 1, 1994 after 32 years of service. She has received two prestigious honours during 1994-95. On May 27, 1994 she was awarded an Honorary Doctorate of Laws Degree from Dalhousie University, and delivered the Convocation Address. On February 23, 1995 the Board of Governors of the University of Manitoba approved the distinguished appointment of "Professor Emerita" for Marnie Forgay effective March 1, 1995. Marnie is currently serving as President of CDHA.

The School welcomed back Professor Laura MacDonald (Dip DH '81, M Ed '87) to a full-time tenure track position which commenced July 1, 1994. She has primary responsibility for coordinating the second year dental hygiene clinic program. Laura is currently involved in a collaborative research study entitled "Gingival Temperature as an Indicator of Periodontal

Disease". This study is looking at the correlation of gingival temperature and the presence or absence of periodontal disease.

Professor Ellen Brownstone was awarded the 1994 Canadian Dental Hygienists Association/Procter and Gamble Graduate Student Fellowship of \$5,000 in Saskatoon on June 17, at CDHA's Annual Professional Conference. She is conducting a qualitative research study to conceptualize the professional culture of dental hygiene. This research will complete her PhD studies at the University of Manitoba.

The School's part-time faculty members continue to play active roles in the profession's provincial associations. Part-time faculty member Ms. Nancy Hughes is serving as President of the Manitoba Dental Hygienists Association (1994-95), while another part-time faculty member, Ms. Lorraine Glassford serves as MDHA's Immediate Past President. Ms. Signe (Arason) Jewett has been elected as President of the Dental Auxiliaries Association of Manitoba (DAAM) for a three year term commencing with the 1994-95 term.



Algonquin College Nepean, ON

May, once again found students and faculty 'winding down' after a particularly busy academic year. Dental

Assisting students completed their final 70-hour placement in area Dental Offices. In addition to an earlier one-week work experience in February, the Dental Assistant class continues to spend regular rotations in Algonquin's Dental Hygiene clinic. Here, students are able to gain practice in charting, infection control, various oral procedures and radiography. This integration has proved to be a positive experience for both dental assisting and dental hygiene classes.

The Dental Hygiene students were involved in a variety of health promotion activities in the community during the year's final term. Table clinics and oral health presentations were delivered at the College's Day Care facility, E.S.L. classes and to the general student body at three Ottawa campuses. Rehabilitation counsellors and intervenors from The Canadian National Institute for the Blind met with the dental hygiene students and subsequently, some students were given the opportunity to work with visually impaired clients. Dental hygiene students also visited Psychiatric and Chronic Care Hospitals as part of their Community Health Course.

Curriculum revisions this year will focus on meeting Provincial guidelines for General Education. Faculty members and the college's Educational Support Services will be working closely together to ensure that Ministry Directives are met.

It has been a pleasure this year to have Laura Myers on staff. Laura, a graduate of John Abbott College, replaced Cathy Thom during her Leave. Cathy meanwhile, has continued to serve as Provincial Coordinator for the Dental Hygiene Cooperative Admissions Project and now also sits on Council as an educational representative for The College of Dental Hygienists of Ontario.

Cambrian College Sudbury, ON

Cambrian College has a 20-unit clinic and a student body of approximately 100 students in English and French dental health education programs. Applicants come from diverse areas of the province and from varied past experiences. There were three males enrolled in the programs for the 94/95 academic year.

The faculty consists of three co-ordinators, four full-time faculty, and 20 part-time members. This year many have participated in the newly formed Dental Hygiene Educators Association of Ontario (DHEAO) and the Co-chairs of this Association are Claudette Carbone and Heather Blondin of Cambrian College. They function as liaisons between the organization and the many groups representing the interests of Dental Hygienists and Dental Hygiene Educators during this busy transition period for the profession.

The faculty at Cambrian are in the process of completing a series of videos for use in teaching dental hygiene clinical skills. The video titles range from Intraoral Exam Procedures to Specific Intraoral Fulcrums and Operator Positions for Scaling. The videos, once completed, may be purchased by students and by other interested colleges.

A new college named College Boreal will open in the fall of 1995. At that time, Hygiene Dentaire and Soins Dentaires will be taught by this college.

This year, intraoral dental assisting skills training was introduced at Cambrian College. In response to the Regulated Health Professions Act, courses are provided through Adult Education as needed. Graduates of these courses will be eligible to write the National Level II C.D.A.A. examination.

Cambrian College will be offering, for the first time, a dental hygiene certificate of registration examination preparatory course during the first part of August, 1995. The course will provide the dental hygiene graduate with an opportunity to maintain clinical skills and become familiar with the clinical setting prior to sitting the province's Certificate of Registration Examination. The College of Dental Hygienists of Ontario (CDHO) will be conducting the examination at Cambrian College provided there are sufficient applicants.

Confederation College Thunder Bay, ON

September and October were busy months for the 18 dental hygiene students, 30 dental assisting students and faculty at Confederation College. Several curriculum changes took place, resulting in the students developing critical-thinking, decision-making and problem-solving skills. Sue Raynak was Coordinator for these two months while Gail Sargent travelled to Kunming, Southern China to instruct dental teachers on how to teach dental hygiene. Gail was reunited with Dr. Guo, a female dentist, who studied in Thunder Bay for three months in the fall of 1994.

Faculty were involved in some exciting activities outside of the classroom this year. Sue Raynak had the honour of being selected by the College Standards and Accreditation Council (CSAC) to participate with other Ontario educators in developing graduate profiles for Dental Hygiene and Dental Assisting programs. She also facilitated several meetings for the newly formed Dental Hygiene Educators Association of Ontario (DHEAO). She is also involved at the national level as a CDHA Director and serves on the Practice and Regulations Council.

Maureen Harrington's clinical knowledge, acquired through a degree from the University of Missouri at Kansas City (UKMC), has been a great asset to the dental hygiene program. Maureen continues to enthusiastically work in clinic with struggling students.

Gail Sargent is serving as Chair of Heads of Dental Programs for Ontario, Education Chair for the Ontario Dental Hygienists Association, as well as ODHA Component Director. Dental hygiene and assistant education is rapidly changing in Ontario since the new Health Professions Legislation Act came into effect. The Ministry of Education and Training recently invited members of the College of Dental Hygienists of Ontario (CDHO) and the Ontario Dental Hygienists Association (ODHA) to discuss the future of dental hygiene. Ontario educators are looking forward to Dental Hygiene becoming a direct-entry program of at least two years duration.

The dental hygiene students continue to be hardworking. Laura Foster, a 1993 graduate of the Assistant Program, and now a student in the Dental Hygiene Program, won the President's Medal at Confederation College and was also in contention for the Governor General's Medal.

During April (Dental Health Month) dental hygiene students enthusiastically supported efforts to staff booths at Mall Displays, offering their time and expertise to help increase public awareness of oral health issues.

Durham College Oshawa, ON

Durham College's dedicated dental hygiene staff were challenged this year with a re-organization of program delivery. The traditional two semester program is now being delivered in five modules. Staff worked hard to adjust to the change, while student reports indicate they enjoy the concentrated format that the modules offer. Consequently, an even closer relationship has developed between the dental programs' five full-time staff and the 90 dental hygiene/assisting students.

A variety of guest speakers shared their knowledge and experience with the students, helping them gain insight into new technologies, public health, medical emergencies, as well as general information on disability insurance and how to be prepared for seeking employment. Representatives from the ODHA and CDHO were also welcomed by the students, as they updated the students on Association activities, current professional concerns and licensure.

The dental hygiene students worked hard throughout the year on research assignments, needs assessments and delivering the oral health message to many community groups and health care facilities.

To top off this full year, several dental staff have committed their time and energy into developing a pilot program for Level II Intraoral Dental Assisting. The College's 66 dental assisting students felt they deserved the opportunity to continue their studies at Durham. The College's management and dental program staff were quick to respond, and have offered this year's graduating class an opportunity to apply for a seat in this pilot program. Twenty-four students were accepted into the program, which ran full-time from June 5-30.

College staff continue to work on shifting from an objective subject format, to an educational process based more on learning outcomes. They look forward to the future recommendations that will be a result of the effort put forth by the College Standards and Accreditation Council (CSAC) Committee.

George Brown College Toronto, ON

In the 1994/95 academic year there were 45 full-time dental hygiene students and 80 full-time dental assisting students enrolled at George Brown. Susan Rudin, Coordinator of the George Brown College, Dental Hygiene Program, reports numerous faculty changes this year. Susan herself returned to the faculty as coordinator, after a secondment to the Community Outreach Department. During the secondment, Susan developed and coordinated the Seniors Access Institute, which provides programming at the College to over 1200 seniors annually. Anne Bosy has also returned to the faculty as the

*Interdependence and Independence
Striking A Balance*



June 7-9, 1996
The Westin • Calgary, Alberta

Coordinator of Continuing Education for all dental programs. Anne received her Master of Science in Malodour at the University of Toronto and was co-founder of the Fresh Breath Clinic. Evie Jesin and Harriet McCabe are both on sabbatical and will return in the 95/96 school year. Carolyn Kay, a part-time faculty member, covered with a full-time sessional position this year. The faculty look forward to stability in the full-time staffing status.

Targeted for change this year were a number of areas that involved more than one program. In the past, all dental program students were taught infection control as part of their laboratory or clinical courses. In the 1995/96 academic year all dental program students will participate in a 15-hour infection control course developed by Kathy Prypasniak, Coordinator of the Dental Assisting Program. The programs involved include dental assisting, dental hygiene, restorative dental hygiene, dentist and dental technology.

In an effort to provide a more cohesive approach to client care, all forms used in the various clinics will be modified. Greater integration of the programs continues to be a focus. Students in the dental assisting, dental hygiene and restorative dental hygiene programs will all collaborate in the client-screening process. This approach is expected to provide enhanced learning opportunities across programs.

This year, in an effort to integrate the dental hygiene process across the curriculum, the concept of Grand Rounds was developed. Students prepare a specific case for presentation on a number of topics for all faculty. The faculty, particularly those not involved in the clinical program, were quite pleased with the development of this concept and expect to continue it next year.

La Cité Collégiale Ottawa, ON

L'année 1994/95 s'est avérée assez chargée pour les programmes de Soins dentaires et Hygiène dentaire. La commission de l'agrément dentaire du Canada a accordé un agrément complet pour le programme d'Hygiène dentaire pour une période de sept ans. Nous avons accepté 24 étudiant(e)s en Soins dentaires. Louise Thompson, qui leur a enseigné la majorité des cours, mentionne que les étudiant(e)s étaient

occupé(e)s à compléter plusieurs projets, entre autres des stages dans des cabinets privés et de spécialité. Ensuite, dans le programme d'Hygiène dentaire, les 14 étudiantes ont participé à plusieurs projets de classe, tout particulièrement celui des besoins spéciaux où chaque étudiante était jumelée à un(e) client(e) ayant un handicap quelconque. L'étudiante devait trouver une façon de donner des instructions d'hygiène buccale adaptées à son/sa client(e). Un autre projet important fut celui des visites de dépistage buccal dans un résidence pour personnes âgées. Les hygiénistes révisaient leur histoire médicale, effectuaient un examen buccal et inscrivaient au dossier les données retrouvées en bouche et indiquaient leurs recommandations.

Du côté du personnel enseignant, nos professeures ont contribué grandement à représenter leur profession. D'abord, Sylvie Martel coordonnatrice des stages et de la clinique a été nommée, pour une période de deux ans, pour siéger sur le conseil de l'Ordre des hygiénistes dentaires de l'Ontario à titre de représentante des milieux d'éducation en hygiène dentaire. Ensuite, Linda Bélanger, coordonnatrice du plan d'étude a également été élue comme présidente du nouveau Regroupement des hygiénistes dentaires de l'Ontario. Elle a aussi complété cette année son baccalauréat en psychologie et se prépare à poursuivre ses études à la maîtrise en counselling éducationnel.

La Cité collégiale se prépare à emménager dans ses nouveaux locaux. Le site permanent sera prêt à ouvrir ses portes dès septembre 1995. Une toute nouvelle clinique dentaire est construite, comprenant 21 chaises, 5 salles de radiographie, 24 postes de laboratoire, 1 salle d'entrepôt, 1 salle d'archives et 1 salle de réception. Les étudiant(e)s auront également accès à leur salle de toilettes/caisiers/douches. L'aire de la clinique, munie de grandes fenêtres, comprend des équipements très modernes et répond à toutes les normes concernant la radioprotection et l'asepsie. L'ouverture officielle se fera au mois d'octobre 1995 où l'invitation sera faite à tous ceux et celles qui sont intéressé(e)s à venir nous visiter.

This year has been a busy year at La Cité collégiale. They are preparing to move into new facilities equipped with a new state-of-the-art dental clinic. The clinic was built to meet all the safety requirements, especially where infection control is concerned.

An invitation will be forthcoming for those interested in visiting the new college in October 1995.

Niagara College Welland, ON

Carole Ono, Coordinator of the Dental Hygiene Program at Niagara College, reports that the Dental Hygiene program has undergone a number of dynamic changes through curriculum revision. These program changes have provided a shift from a primarily skills-based format to one reflecting the conceptual framework of the Process of Dental Hygiene Care.

Didactic, theoretical, and clinical courses have been amended to reflect the components of assessment, planning, implementation and evaluation and to incorporate cognitive skills, and their application to the process of care. Concentration on client-centred care, collaborative care, critical thinking and problem solving, self-evaluation, and accountability, provide an updated focus.

One successful component of the Preclinic course is the requirement that students maintain a journal of their preclinical experiences. Students are asked to include analysis of performance, improvement strategies, and faculty feedback, for example. The aim of this activity is to encourage self-evaluation and to foster the development of problem-solving strategies.

The students actively participated in community oral health placements at a facility for mentally and physically challenged adults. This, in combination with involvement with the Regional Niagara Dental Public Health Unit, keeps the students active in the public sector. These interesting and challenging assignments also allow the students to apply the dental hygiene process of care outside of the traditional clinical setting.

A pilot study is currently being undertaken by two faculty members to teach intraoral skills to the dental assisting students. The objective of this exercise is to advance Dental Assistant learning in the following areas: rubber dam application, alginate impression taking, coronal polishing, and fluoride application. Further, a number of dental assisting and dental hygiene students are collaboratively delivering oral health education, reflecting the DH process of care, in the clinical setting.

Dental Hygiene faculty members recently enjoyed the fellowship of colleagues at another valuable Dental Hygiene Educators Association of Ontario (DHEAO) forum, at the Kempenfelt Centre in Barrie. This provided a well-needed respite from the rigors of accreditation preparation. Common successes, concerns and goals were discussed and everyone came away with a renewed commitment to the mission of DHEAO.



St. Clair College Windsor, ON

The coordinator of St. Clair College's Dental Hygiene Program, Sadie Hearn, says she is amazed at how much strength and fortitude dental hygiene students exhibit. "With such a heavy workload they always seem able to spare the extra time to volunteer their support for community-based projects," she reports. The class of 1995, 29 students, was no exception. Participation in dental learning experiences for the pre-school proved very interesting and a lot of fun. Dental Health month activities were varied and students spent a lot of time enthusiastically promoting oral health at many locations through the city. Especially productive, were the experiences spent at Colasanti's Nursery and Greenhouse a southwestern tourist attraction. Visitors were treated to enthusiastic students explaining the advantages of good oral health.

A new computer-assisted record system was installed in the past year and is extremely successful. Centralization of client information and the efficiency of tracking client data, fee payments, student/client allocations and client classification improved significantly. It was especially useful to faculty clinic advisors who track the students' clinical progress through the system, enhancing their ability to counsel students with regard to their clinical activities and requirements.

The college's new Intraoral Dental Assisting Program began in January 1995 and sixteen students enrolled in the inaugural program. The 160-hour course was deemed successful and there are plans to deliver a second five-week summer program. The college also began delivering a Dental Receptionist program which accepted 16 students.

Dental program faculty continue to be busy as well. Marg Pyett continues to work diligently on client recruitment activities while continuing work on her degree. Sherry Frey completed a radiology course in North Carolina and Stephanie Nagle completed her Masters in Education at Central Michigan University. Stephanie is a member of the College Standards and Accreditation Council's Committee on Program Standards Development and a CDHA Director serving on the Professional Development Council. Dental Hygiene Program Coordinator, Sadie Hearn spent the past year taking a computer course and says she no longer considers DOS and WordPerfect a foreign language!

Seneca College North York, ON

For the 1994-95 academic year, 20 full-time dental hygiene and 50 full-time dental assisting students were enrolled at Seneca College. In addition to the usual activities, the Seneca dental health team has been very busy with several new initiatives.

This has been the third year for refining the implementation of dental hygiene process in the clinical curriculum. Clinical evaluation has successfully moved from skill requirements to a client-focused, competency-based system. With dental hygiene process firmly incorporated into the curriculum it has been a very busy and productive year. Using the generic problem-solving framework, faculty developed "dental assisting process". Four distinct, future-oriented work roles for the dental assistant were also articulated. Both the process and the roles form the basis of the dental assisting curriculum. This year also saw the introduction of intraoral procedures into the full-time dental assisting curriculum. One result has been increased integration of the two programs. For example, collaborative clinics, introduced in 1991, were extended again this year.

Field placements and practicums continue to provide valuable learning experiences. Dental hygiene students had a one-week practicum in one of several regional hospitals where they provided comprehensive dental hygiene services to a wide range of clients. They also spent time with the North York Health Department providing oral health education in local schools. Dental assisting students had a one-week practicum at the Faculty of Dentistry, University of Toronto, working in the various dental clinics. Both classes planned, implemented and evaluated oral health demonstrations. The dental hygiene Oral Health Fair was targeted to Seneca nursing students.

Another major focus for faculty has been the expansion of the college's part-time and continuing education programs. The part-time dental assisting program now offers education in intraoral skills through distance education using self-learning packages developed by faculty. Similar theoretical and practical courses are available for certified dental assistants through Seneca's Health Sciences Continuing Education Program. An expanded continuing education program targeted to dentists and dental hygienists will be a focus for the next year.

University of Toronto Toronto, ON

In 1977, the BScD (Dental Hygiene) program at the University of Toronto's Faculty of Dentistry admitted its first two candidates. Since then, 36 dental hygienists have graduated from the two-year program.

The program is open to graduate dental hygienists who, in addition to a Diploma in Dental Hygiene, have first year University credits in Biology, Chemistry, English, Psychology and Sociology. Applicants from a Canadian University-based Dental Hygiene program usually have the above-mentioned credits since these form part of the pre-entry curriculum for the two-year programs. Community College graduates must complete the full admission requirements before being admitted to the BScD (Dental Hygiene) program. It should be noted

that the five credits required for admission form a part of the total University degree requirement.

Dental Hygienists who wish to continue their education beyond the first degree must, in Canada, pursue degrees unrelated to dental hygiene. A small percentage (less than 4%) of the BScD graduates have completed a DDS program, but the majority of graduates continuing their formal education have enrolled in Education or Community Health related Master's programs.

Graduates from the program have found alternate careers in education, community health, hospital administration, research, consulting and management. Mai Pohlak, BScD (Dental Hygiene) is the program's coordinator.



Cégep de Chicoutimi Chicoutimi, QC

In 1986, Cégep de Chicoutimi opened its Department of Dental Hygiene. Three years later, the first class of dental hygienists graduated. Since then, the course has graduated approximately 31 dental hygiene students each year. The percentage of placement following graduation has always been high; and staff member Louanne Arseneault reports that almost 90% of the program's graduates are employed in their field in full or part-time positions all across Canada.

The department staff includes ten dental hygienists and two dentists, working as teachers. The majority of the teachers teach theoretical classes and supervise clinical practice. Over half of the program's staff are enrolled in continuing education programs or actively promoting new projects and innovative clinical practices. In recent years many positive changes have been made by the teachers in the department. One innovative change was the introduction of videotaping during clinical session. This change helped students to explain procedures and treatment to clients and provide instruction on proper oral hygiene techniques. It is an asset for the students to be video-taped because it gives instructors an opportunity to review past performances and witness improvements. Another project initiated by the Department, which brought positive results, was the introduction of mentors. Each trainee has a teacher assigned to act as their mentor. Department staff believe that this program encourages, influences and guides the students in a positive way.

The teachers have also begun to evaluate the 'professional attitudes' of the students while they are treating clients. These evaluations ensure improved feedback to the student from their mentor. Furthermore, evaluations of this nature serve to prepare students for the reality of their future career.

According to Department Coordinator Line Carrier implementing changes and new ideas will continue to improve the educational program which is the foundation of continuing success.

John Abbott College Sainte-Anne-De-Bellevue (Québec)

The 1994/1995 academic year could be qualified as a memorable one at John Abbott. After five years of negotiations, the move of the clinical facilities to the Sainte-Anne-de-Bellevue campus was finally announced by the Liberal Minister of Education himself during an official visit to the College on September 2, 1994, only ten days prior to the provincial elections. A 1.4 million dollar grant was approved by the government to go towards the 2.5 million dollar project.

Already, expectations for the anticipated Fall move are fading. Presently, construction is being delayed pending the approval of the whole project by the new government in power. With a four-month period required for the completion of the project, an August 21 starting date for the Fall Semester is highly unlikely.

Compounding to our "extra curricular" preoccupations this year was the preparation for the April 1995 accreditation site visit. Data collection and documentation went smoothly thanks to the hard work of Francine Trudeau who had been appointed coordinator of the accreditation project. Meanwhile Sandra Lapointe and Jocelyne Long were in charge of coordinating the impending move to the campus.

Five faculty members: Gisèle Johnson, Bess Miller, Francine Trudeau, Amilia Peskir and Lynn Cummings still actively pursued their studies towards an intensive Master's degree program intended specifically for CEGEP teachers.

This year, Lynn Cummings joined the Department as a full-time instructor and took over the Dental Anatomy courses. For the past twenty years or so, Dental Anatomy was taught by Mary Fuger. This year, Mary started on progressive retirement and will maintain a half-time teaching load until she fully retires.

In August, part-time instructor for the past twelve years, Carol Étienne-Farley will return to full-time status.

On June 1, Sandra Lapointe stepped down after twelve years as clinical coordinator. Francine Trudeau will assume responsibility for this task in the future. The next year should be challenging for Francine who will have to schedule 38 third year students into a 16-chair dental clinic. This unusually high enrollment represents a 30% increase from past years and consequently will generate an increase in teacher allocation of .25.

For the past two years, second and third year students have participated in a three-year *Latex Sensitization* study conducted under the auspices of McGill University, Université de Montréal and Hôpital Sacré-Coeur. Next year will be the final year and only the third year students will participate.

In mid-March, Gisèle Johnson attended the AADS conference in San Antonio, Texas. In early April, Francine Trudeau attended a three-day workshop on program revision (atelier d'analyse de situation de travail) in Québec City. She and other representatives from other dental hygiene programs in Québec were invited as observers only. The revised dental hygiene curriculum should be in place by 1997.



Dalhousie University — School of Dental Hygiene Halifax, NS

The School of Dental Hygiene at Dalhousie University has a student body of 80 students. The School provides dental hygiene education primarily for the four Atlantic provinces. Candidates require one year of university prerequisites to apply for the two year program. Students range in age from 19 - 45 years. There are currently seven male students in the program. The student profiles show diverse backgrounds both from a social, economical and cultural perspective as well as career or educational standpoint.

The School's Faculty consists of the Director, four full-time and 20 part-time members. Part-time faculty are involved in both clinical and didactic courses. This year the School was granted full accreditation for seven years. Two part-time and two full-time faculty members presented poster presentations at the American Association of Dental Schools (AADS) meeting held in San Antonio in March 1995.

The clinical program is competency-based, and also requires the students to present cases to their classmates. As the School is included within the Faculty of Dentistry, students are able to experience integration in some courses as well as on the clinic floor. All students gain paediatric experience at a satellite clinic operated in association with an elementary school. In addition, students participate in an externship at Mount Saint Vincent Health Care Centre, a centre and residence for retired nuns. The students see clients in both the two-chair clinic and residents' rooms.

Ten students participated in an extra-mural practice experience in Newfoundland at the Grenfell Mission in St. Anthony. This experience was two weeks in duration and students provided treatment in the dental clinic at the hospital and learned a little about life "on the rock".

Students are required to present a table clinic as part of a major annual faculty event that also includes presentations by third year dental students. This year there were three winning clinics: "Carpal Tunnel Syndrome: An Occupational Hazard", "Which Brush? It's a Matter of Choice" and "To See or Not To See" (The Importance of Protective Eye Wear in Practice). For the first time, the Dental Hygiene Students' Society provided a prize for the first place winners — accommodations for the winners to present their clinic at the CDHA Annual Professional Conference. In addition, the students who presented the two other clinics elected to apply to present their table clinics at the CDHA Conference. The presenters of these table clinics have submitted their documentation to *PROBE* for consideration for publication in a future issue.

The Dental Hygiene Students' Society initiated a Health Professions Fair at which members of the dental hygiene program, together with students from other health care programs present cases to an audience of both students and Faculty. The students provide an interactive exchange of information about how the various professions can contribute toward an improvement in health of clients through an understanding of the expertise offered by the professions and through communication between professions.

The senior students were active in the community this year. They participated in the funding drive for the Alzheimer's Society, the Open Wide Clinic offered at Dalhousie, activities organized by the NSDHA during National Dental Hygiene Week, and a counseling session offered to parents of children at risk for caries, at a local school.

The School's senior students graduated in May. Its first year students completed their year at the end of May. In June, Halifax and the Nova Scotia Dental Hygienists Association hosted CDHA's 6th Annual Professional Conference. Part-time Professors Gregg, Robb and Grant presented at the Conference and many other Faculty donated their time to help organize the event.

The School's Director for the past five years, Joanne Clovis, will be taking an administrative leave of absence to pursue her PhD studies. She has elected not to re-offer for the Director position. Although an official announcement regarding the incoming Director, had not been made at press time, the change in leadership will necessitate that Faculty review the course offerings and course directorships with an eye to perhaps redistributing the teaching responsibilities. Redistribution can provide both an opportunity and a challenge for Faculty. There is no doubt that the summer will be busy with reviewing and revising courses.

prepared by:

Carol Barr Overholt, Dip DH

Article: Osteoporosis: A Risk Factor in Periodontal Disease

Authors: Nina von Wöern, Bjarne Klausen and Gina Kollerup
Journal: *Journal of Periodontology* Vol 65, No. 12, December 1994

More than one third of post-menopausal Western women over the age of 65 evidence symptoms of osteoporotic fractures. As alveolar bone loss is featured in the periodontal disease process, severe osteoporosis may be a significant intensifying factor.

This article reviews the long-suspected relationship of osteoporosis to periodontal disease, as a risk factor. Linking the two, through research, has been hampered in past by variable factors including gender, smoking, race, hormone supplementation and age. Further, the bone density assessments were conducted on the metacarpal bones; this may not accurately reflect the bone mineralization levels of the mandible.

Twenty-six dentulous Caucasian women were selected for the study, twelve as candidates, and fourteen as the control group. The participants, for study inclusion, had to present with a non-physiologic hip or forearm trauma and evidence low bone mineral content (BMC). The control group did not present with osteoporosis and were matched for age, age of menopause, and smoking habits.

Using a dual-photon scanner, the BMC of the mandible and forearms was measured. Periodontal examinations included a plaque and gingival bleeding index on six selected teeth. Attachment levels were measured at three sites on these teeth.

The plaque and bleeding indices did not significantly differ between the two groups, however, the osteoporotic women demonstrated a considerably greater loss of attachment. The researchers suggest that it is probable that the less BMC present in the alveolar bone, the greater the potential speed of resorption; this may correlate with poorer attachment levels in the presence of periodontal disease.

The clinicians propose that the clinical significance of these results may be that physicians should refer their clients to a dentist when osteoporosis is identified, for a thorough periodontal examination. Conversely, the dentist would refer post-menopausal female clients, with severe periodontitis, for a medical consultation to determine the osteoporosis status.

The authors indicate that further research is needed to examine the potential effect of prophylactically treating osteoporosis, on periodontal attachment loss.

**Article: Tooth Bleaching for Children and Teens:
A Protocol and Examples**

Authors: Theodore P. Croll
Journal: *Quintessence International* Vol 25, No. 12, December 1994

There is considerable literature discussing the merits of vital tooth bleaching with carbamide peroxide solutions applied in custom-fitted trays. Favourable and predictable results, with few adverse effects, have been reported; measurable risks for this procedure may include transient tooth or gingival sensitivity.



This article reviews and addresses a number of questions relating to the considerations of treating younger clients, and offers a clinical protocol for application.

Although white dimineralization or decalcification spots may be eliminated by enamel microabrasion, the client may consider the enamel surface dark, or yellow. Tooth bleaching may then be indicated. Enamel microabrasion is often performed prior to bleaching to remove superficial discoloration and create a superior surface luster.

Plaster or stone casts are constructed and a "gully" tracing the gingival margin is produced with a small round bur, to improve custom tray adaptation and minimize bleach leakage. Soft, 1 mm thick vinyl trays are fabricated and carefully trimmed with sterile manicure clippers to follow the marginal gingival contours. Two mm of 10% carbamide peroxide gel are injected into each tooth space and the trays are inserted.

Three bleaching schedule protocols are offered. *Method 1:* With adult supervision and a scheduled dental evaluation, the client inserts the trays after nightly toothbrushing and flossing and removes them upon arising in the morning. This schedule is followed for 21 days. *Method 2:* With adult supervision and a scheduled dental evaluation, the client inserts the trays following the evening meal, removes, rinses and reapplies the solution one hour later, and repeats this at two consecutive hourly intervals. This is followed for 21 days. *Method 3:* The first two methods are offered as a combined regimen. Sensitivity complaints may increase with this therapy.

After the 21 day schedule has been completed, the results are assessed, and if satisfactory, the client applies a 1.1% neutral sodium fluoride solution, using the fitted trays, for 7-14 days. The use of a topical fluoride solution may improve or promote the superficial enamel remineralization process, and surface layer. The author suggests that although further bleaching is rarely necessary, the procedure may be repeated. Some clinicians treating mild cases of tetracycline staining convey that additional bleaching may be needed. Clients and their parents should be informed that some tooth darkening may occur, but that complete regression to the original tooth coloring is unexpected. If this transpires, the protocol may be reinstated.

The author reports that approximately one half of his clients experience some tooth sensitivity; this has not caused any to cease treatment. Gingival irritation has been effectively eliminated by the use of the snug-fitting custom trays and the limited amounts of bleaching solution.

Disappointing results appear to be related to poor client compliance rather than the effectiveness of the carbamide peroxide. A caution is therefore included: parents need to monitor the dispensing and application of the agent.

The article concludes that home dental bleaching may prevent long office visits, offering treatment that "is easier, more convenient, and practical", and provide a low-cost method of improving enamel color for younger clients.



Dental Radiography Laboratory Manual

Author: Sandra Slack Olson, RDH, MED, CAGS

Publisher: W.B. Saunders Company

The Curtis Centre

Independence Square West

Philadelphia, PA 19106

Copyright 1995, 171 illustrations, indexed., 243 pages, price: \$33.50

Reviewed by MWO Claude Bujold, Dip DH, Instructor Dental Hygiene Program, Canadian Forces Dental Services School, CFB Borden, Borden, ON

The Dental Radiography Laboratory Manual encompasses a complete theoretical and practical learning approach to basic dental radiography.

The physics of radiology and radiography are thoroughly covered, yet the level of knowledge is kept at a level which will permit the student to acquire a sound basic knowledge without the need to become a rocket scientist.

On the practical side, all the basics are covered. Chapters are devoted to the following topics: intraoral, extraoral, panoramic radiography and bitewing technique. Both long cone paralleling and bisecting angle techniques are also covered.

Chapters on radiation hazards and protection, infection control, basic patient management, basic radiographic interpretation and processing, complement the remainder of the book.

The text is written in a simple and comprehensible manner which facilitates teaching and learning. The large print and spacing makes it very easy to read. Key words and concepts are well highlighted.

The figures and diagrams are clear and concise and support the text well. A good example of this is in chapter seven which deals with the principles of shadow casings where the figures and diagrams make understanding these principles fairly simple. The pictures of radiographs are of good quality.

A strong quality of this book are the review questions and learning activities and exercises at the end of each chapter. They enable the student and instructors to confirm assimilation of both theory and practical subjects.

As stated in the preface, this manual was designed to supplement other available radiographic texts. It can be adopted in whole or in part, to any curriculum. It can also be a valuable text for the practicing dental assistant or dental hygienist for review purposes.

In essence, this is one of the better radiography textbooks I have read. I actually enjoyed reading it and recommend it without hesitation.



Managing Oral Health Care Delivery, A Resource for Dental Professionals

Author: Catherine L. Gannse, RDH, MS

Publisher: Delmar Publishers, 3 Columbia Circle, Box 15015, Albany, NY 12212-5015

Reviewed by: Audrey J. Newcombe, Dip DH, BSc, Instructor, Holland College, Dental Assisting Program, Charlottetown, PEI

"Managing Oral Health Care Delivery" provides a concise synopsis of the mechanics of the business of Dental Hygiene. Although many dental hygienists do not feel that the business side is something that has to be addressed, with the advent of new practice alternatives, it may be wise for the dental hygienist to be more knowledgeable about the business aspects of dental hygiene. The author is a clinical dental hygienist and study nurse with the Rivers Centre Dental Associates. Contributors to the book include individuals with backgrounds in Dental Hygiene education and research.

The book is useful to individuals engaged in the broad spectrum of dentistry. It is an excellent tool for dental hygienists who have an interest in management areas or independent contracting. Increasing the potential employment opportunities for dental hygienists rests in expansion of practice settings and additional management expertise making this book a valuable resource. The book provides direct and accurate "how to" information on a number of critical practice components.

It is well organized in sections that can be independently referred to areas of interest. It would also serve well as a practical guide to 'practice changes' based on the principles outlined throughout the book. Part One deals with the Principles of Business Management. The issues dealt with in the various chapters include, the Business Plan, Human Resources, Finance, Marketing (including Public Relations), Quality Assurance mechanisms, and Quality of Care.

The section on Practice Management defines the Dental Hygiene Profit Centre. It addresses the business basics of establishing a profit margin. It also deals with the delivery of oral health care in the context of the business paradigm. The importance of office protocol and policy in relation to the level of client care is stressed. Also, the Practice Management model discusses market research and how it can develop within a practice's resources. There are simple guidelines for determining the material you have and how it can be compiled into market research formats. This chapter also provides details on how to use this information and develop your business objectives.

Client rights are considered a vital part of any practice management plan and a full chapter is devoted to this issue.

While the book is an invaluable resource for dental hygienists considering or already utilizing independent contracting, it is also an important reference for dental hygienists who are moving into management positions in any practice settings. The dental hygiene manager is explored as this role applies to educational leadership, administration of curriculum, products industry, public health and research.

The relaxed approach of the book's writing style sets the reader at ease and facilitates absorption of the material. The chapters are formatted with clear reference headings making quick referencing easy.

I would recommend the book for any dental hygienist (student or practicing), who has any interest in the business aspects of dental hygiene.

RESOURCE CENTRE — NEW ACQUISITIONS

Oral Care for the Dependent Patient

This video, produced by the West Virginia University's School of Dentistry and the Geriatric Program at Morgantown, West Virginia provides caregivers with basic, useful information necessary to conduct an oral screening and develop a plan of daily mouth care and infection control for dependent patients. The video is intended primarily for family and institutional primary care providers and students in health professions.

(one available)



The Canadian Dental
Hygienists Association
L'Association Canadienne
des Hygiénistes Dentaires

Your Professional Partner

Wondering where your Professional
Partner stands on fluoride,
Dental Hygiene Licensure or
Management of Dental Hygiene Care?
Read the CDHA Position Statements.
They're in your Member Manual.

1-800-267-5235



CANADIAN CENTER FOR CONTINUING DENTAL EDUCATION INC.

Presents

CURRENT ADVANCES IN DENTISTRY

A 28 credit hour academic course to fulfill the TOTAL YEARLY Continuing Education requirement for dentists and allied personnel in a FOUR DAY comprehensive course.

SUNDAY, OCTOBER 29 — WEDNESDAY, NOVEMBER 1, 1995
THE WESTIN BAYSHORE HOTEL, VANCOUVER, B.C., CANADA

Faculty and Course Agenda: Faculty members are from Canada and the United States

Dr. E. J. Hannigan	Periodontics:	Periodontics for the dental team
Dr. T. Larder	Endodontics:	Diagnosis, Instrumentation, Obturation, Bleaching
Dr. P. Cyr	Oral Surgery:	Mandibular anesthesia — The Hot Tooth
Dr. P. Cammarata	Prosthodontics:	Restoration of endodontically treated teeth, Principles of esthetics, Anterior ceramic restorations, Simple 3-Unit FPD construction

Tuition:	Any One Day	Any Two Day	Full Course	<i>Continental breakfast, full lunch and coffee breaks are included each day in tuition cost.</i>
Dentist:	\$225.00	\$425.00	\$695.00	
Allied Personnel:	\$115.00	\$200.00	\$375.00	

Accreditation: This program is eligible for Category I credit hours.
SEVEN CONTINUING EDUCATION HOURS will be awarded for EACH DAY.

To Request Information • Brochure • Hotel Accommodations • Contact: Janet Dawson
CCCDE • Tel: 1-800-494-5536 • Fax 1-800-494-5536 • 125A-1030 Denman St., Vancouver, B.C. Canada V4G 2M6

Facts on Aging

- | | | |
|---|---|---|
| 1. The majority of people over 65 have defective memory, are disoriented or demented. | T | F |
| 2. Older people usually take longer to learn something new. | T | F |
| 3. Physical strength tends to decline with age. | T | F |
| 4. Most older people are set in their ways and unable to change. | T | F |
| 5. It is almost impossible for most older people to learn new skills. | T | F |
| 6. The reaction time of most older people tends to be slower than reaction time of younger people. | T | F |
| 7. All five senses tend to decline with age. | T | F |
| 8. The majority of older people seldom become irritated or angry. | T | F |
| 9. About 80% of the aged are healthy enough to carry out their normal activities. | T | F |
| 10. The majority of older people are seldom bored. | T | F |
| 11. Over 10% of the Ontario population are now age 65 or over. | T | F |
| 12. The incident of oral cancer increases with age. | T | F |
| 13. Most medical practitioners tend to give low priority to the aged. | T | F |
| 14. The majority of older people have incomes below the poverty level (as defined by the Federal Government) | T | F |
| 15. Maximum oxygen consumption (the maximum amount of oxygen that a person can use) tends to decline as one ages. | T | F |
| 16. Over 75% of the elderly have one or more chronic diseases. | T | F |
| 17. The elderly fracture their bones far more frequently than the young or middle-aged. | T | F |
| 18. The health and economic status of older adults will be about the same or worse in the year 2010 compared to younger people. | T | F |
| 19. Men usually outlive women. | T | F |
| 20. The majority of older people feel miserable most of the time. | T | F |

Answers:

- | | | | | | | | | | | | | | | | | | | | |
|----------|---------|---------|----------|----------|---------|---------|---------|---------|----------|----------|----------|----------|-----------|----------|----------|-----------|-----------|-----------|-----------|
| 1. False | 2. True | 3. True | 4. False | 5. False | 6. True | 7. True | 8. True | 9. True | 10. True | 11. True | 12. True | 13. True | 14. False | 15. True | 16. True | 17. False | 18. False | 19. False | 20. False |
|----------|---------|---------|----------|----------|---------|---------|---------|---------|----------|----------|----------|----------|-----------|----------|----------|-----------|-----------|-----------|-----------|

Submitted by Maureen Adams, BScDH, Teacher in Dental Assisting and Hygiene Programs, Confederation College, Thunder Bay, ON. Questions were derived from a quiz developed by the University of Guelph, Gerontology Research Centre, sponsored by the Health Care Advisory Committee, Ministry of Citizenship, Office for Seniors' Issues, Toronto, ON.

LISTERINE

ANTISEPTIC - ANTIPLAQUE
ANTINGIVITIS - MOUTHWASH

INDICATIONS: Helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care. Kills the germs that cause bad breath, plaque, gingivitis and sore throats due to colds.

CAUTIONS: Keep out of reach of children. Do not swallow. Not to be used by children under 12 years of age. In case of accidental ingestion, contact a Poison Control Centre or doctor immediately.

DOSAGE: Rinse full strength with 20 mL for 30 seconds twice a day.

MEDICINAL INGREDIENTS: Eucalyptol 0.091% w/v, Thymol 0.063% w/v, Menthol 0.042% w/v.

NON-MEDICINAL INGREDIENT: Alcohol.

NOTE: Cold temperatures may cloud this product, its efficacy will not be affected.

SUPPLIED:

Original Listerine: Clear, amber liquid available in bottles of 250, 500, 750, and 1,000 mL.

Cool Mint Listerine: Clear, blue, cool mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.

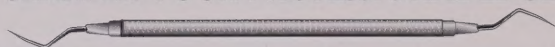
Fresh Burst Listerine: Clear, green, mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.

LISTERINE FIGHTS GINGIVITIS
WITHOUT STAINING

WARNER
WELLCOME

©1997 Warner-Lambert Company Inc. Use Scarborough, Ontario M1L 2B3





Prepared by:

Nancy Neish, BA, Dip DH, MEd, Brenda Fortune, Dip DH

The Dilemma

Joan, a recent dental hygienist graduate, and her husband, moved to a small town of 5,000 people where her husband had secured a teaching job in an elementary school. Joan was particularly pleased to discover that Dr. Brown the town's only dentist, was very eager to hire her to work full time in his busy practice. At the interview he lamented that he had wanted to hire a dental hygienist for the past six or seven years, but no one had been interested in working in the small town where his practice was located. He was happy to learn that Joan would be moving to the town.

During her first few days on the job with Dr. Brown, Joan came to realize that Sue, a 10-year employee and former receptionist was seeing clients and performing both scaling and polishing procedures. There were four chairs in the practice and Joan and Sue were working in operatories side by side. Joan occasionally overheard Sue and Dr. Brown talking with clients, and it sounded to Joan like Sue knew what she was doing and had a good rapport with both the clients and Dr. Brown.

After some discussion she discovered that Dr. Brown had taught Sue how to scale and polish, as well as provided her with home care instruction, about three years ago, when it appeared that he would never be able to hire a licensed dental hygienist. Sue knew what she was doing was not strictly "by the book" but she appreciated the challenge and opportunity which Dr. Brown had offered her. She was a single parent and the extra money went a long way toward looking after her eight-year-old.

Joan is very concerned that Sue is practising illegally and decides to talk over the matter with her husband.

1. Gather the facts

- Joan is a recent dental hygiene graduate
- She moved to a small town (5,000) with her husband who has a teaching position
- She was hired full time by Dr. Brown, the town's only dentist
- Dr. Brown did not inform Joan, during her job interview, that his receptionist was working as a dental hygienist
- Dr. Brown tried unsuccessfully to employ a dental hygienist for 6-7 years
- Dr. Brown trained his receptionist of 10 years, Sue, to perform scaling, polishing and home care instructions, and she has been providing these services to clients for the past three years
- There are four chairs in the dental practice
- Sue and Joan work in operatories that are located side by side
- Joan could overhear both Sue and Dr. Brown talking with clients and it sounded as if Sue knew what she was doing and had a good rapport with both the clients and Dr. Brown
- Dr. Brown decided training Sue was the only means available to him to provide full care for all the clients in his practice
- Sue understood that what she was doing was not strictly 'by the book', but appreciated the challenge and the extra money she earned for this for providing these services
- Sue is a single parent with one child

The clients have not been given any choice in whether they have a licensed dental hygienist performing the dental hygiene duties or someone who, although trained on-the-job, is not legally able to provide such services.

Principle 3: Veracity and Informed Consent.

Based upon respect for clients regard for their right to control their own care, dental hygienists must respect the right of choice held by clients.

The clients have not been informed of the fact that Sue is not a licensed dental hygienist and therefore they are unable to make a choice based on informed consent.

Veracity has also been compromised by the fact that Joan was not informed of Sue's status as an unlicensed practitioner when she was hired.

Clients are not aware that Sue is working illegally as a dental hygienist and that she has received no formal education from an accredited institution. Clients and insurance companies are being billed for services rendered by a licensed individual, when in fact, this is not the case.

Principle 4: Beneficence and Quality Assurance.

The dental hygienist is obligated to provide competent care (doing of good) as currently described in the clinical practice standards for Canadian dental hygienists in Canada.

Standards:

- 4(a)** *The dental hygienist actively promotes educational and clinical procedures to improve the oral health status of clients.*

2. Identify the Relevant Values and Principles (from the C.D.H.A. Code of Ethics)

Principle 1: Respect for Persons.

A dental hygienist has an obligation to treat clients with respect for their individual needs and values.

Sue does not have the educational background to recognize clients individual needs, and therefore is not competent to treat clients.

4(b) *The dental hygienist participates in the assessment, planning, implementation and evaluation of comprehensive programs of oral health care. The scope of a dental hygienists responsibility should be based on education and experience as well as legal considerations of licensure and registration.*

4(c) *Dental hygienists accepting professional employment must determine if the conditions will permit provision of care consistent with the practice standards for Canadian dental hygienists, and the values and standards of the code of ethics for dental hygienists. Prospective employers should be informed of the practice standards and the code so that realistic and ethical expectations may be established at the beginning of the employer/employee relationship.*

4(g) *The dental hygienist accepts responsibility for working with provincial and national dental hygiene associations to secure quality care for clients.*

4(h) *Dental hygienists should engage in continuing education and in the advancement of skills relevant to practice setting.*

All the above-noted standards have been violated by Dr. Brown since he provided his receptionist with on-the-job training and then allowed and encouraged her to provide dental hygiene services despite her unlicensed status.

Principle 5: Justice.....What is deserved

The dental hygienist, as a member of the dental profession, is obligated to take steps to ensure that the client receives competent ethical care.

Standards:

5(a) *Client care should represent a collaborative effort, drawing on the expertise of dental hygiene, dentistry and other health professions when appropriate. Recognizing personal and/or professional limitations, the dental hygienist refers clients who require more complex care or care outside the scope of dental hygiene care.*

5(b) *The first consideration of the dental hygienist who suspects incompetence or unethical conduct by members of the dental profession should be the welfare of present clients and or potential harm to future clients. The following should also be considered.*

- i. *the dental hygienist is obligated to confirm the facts of the situation to decide on an appropriate course of action.*
- ii. *institutional mechanisms (e.g. educational programs, public health) for reporting incidents or risks of incompetent or unethical care should be followed.*
- iii. *incidents involving unethical care that cannot be resolved within the practice setting should be reported to the appropriate licensing authority.*
- iv. *the dental hygienist who attempts to protect clients threatened by incompetent or unethical conduct should not be placed in jeopardy (e.g. loss of employment). Colleagues and professional organizations are morally obligated to support dental hygienists who fulfill their ethical obligations under the code.*

The clients, the appropriate licensing body, and the insurance companies all deserve to know that Sue is not qualified to perform

dental hygiene duties. In this case, the ethical principles of Respect for Persons, Veracity and Informed Consent, Beneficence and Quality Assurance and Veracity have all been violated.

3. Explore the options:

1. Joan can discuss the situation with Dr. Brown and Sue

Pros: The three people may be able to resolve the dilemma in a way that is ethical and legal. Clients will be protected from potential harm and a good working relationship will exist.

Cons: Dr. Brown and Sue may become angry, Joan may be fired, clients will continue to receive care from an unlicensed person. Dr. Brown will have a reduced income if Sue no longer works as a dental hygienist. Sue's income may be reduced to reflect her job description.

2. Joan can report unprofessional conduct to the appropriate licensing body.

Pros: Clients will be protected from receiving care from an unlicensed person.

Cons: The only dentist in a small town may lose his licence to practice for a period of time resulting in no dental care for clients, Dr. Brown may be sued, all concerned may lose their jobs.

3. Joan can resign from her job.

Pros: Joan no longer has to work in an office where illegal practices are taking place.

Cons: Clients will continue to receive care from an unlicensed person, and Joan will be unemployed.

4. Joan can ignore what is happening and continue to work.

Pros: The status quo will be maintained. The practice will continue and all concerned will keep their jobs.

Cons: Clients will continue to receive treatment from an unlicensed person.

4. Choose an Option

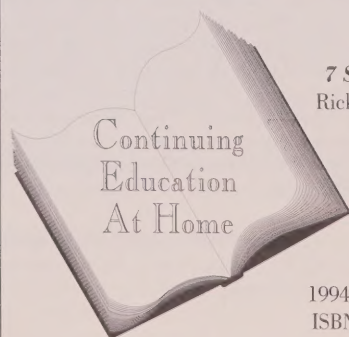
Joan should first approach Dr. Brown and Sue in a diplomatic, factual and tactful way to discuss the ethical dilemma in respect to their responsibilities to the clients, public and profession, as well as the legal implications. Possible resolutions to the conflict could be discussed in a positive way. Perhaps Sue could be given additional responsibilities (office manager) or, if possible, given the opportunity to attend an accredited school of dental hygiene with financial assistance from Dr. Brown.

If Dr. Brown makes appropriate changes, the clients may wonder why Sue is no longer treating them, and Sue may end up with a reduced income. Joan has fulfilled her responsibilities to the clients and to her profession. Sue may have the opportunity to continue her education. Sue may feel that the work she performed, benefited the clients even though it was "not by the book". From the perspective of others, this may be an unethical alternative, because the dentist is not disciplined for three years of illegal practice and insurance companies have been billed fraudulently.

If Dr. Brown refuses to stop Sue from working as a dental hygienist, the only option would be to report him to the appropriate licensing body and let it handle the situation.

		SPONSOR	LOCATION	FOR INFO CALL
August				
14-18	Clinical Orthodontic Procedures: A Training Module for Registered Dental Assistants and Hygienists (Instruction/Evaluation Courses)	University of Alberta, Faculty of Dentistry	Edmonton, AB	(403) 492-5023
26-29	CDA Annual Meeting	Canadian Dental Association	Ottawa, ON	(613) 523-1770
September				
Sept. 1 - Dec. 1	Clinical Orthodontic Procedures: A Training Module for Registered Dental Assistants and Hygienists (Theory Component)	University of Alberta, Faculty of Dentistry	Edmonton, AB	(403) 492-5023
8-9	How to do Selective Orthodontics in the General Practice — Modules 1 and 2 — Dr. Walter Pfitzinger	Dalhousie University/ Space Maintainers Laboratories	Halifax, NS	(902) 494-1674
15-16	Canadian Association of Orthodontists 47th Annual Scientific Session	Canadian Association of Orthodontics	Ottawa, ON	(416) 491-3186
22-23	Clinical Orthodontic Procedures: A Training Module for Registered Dental Assistants and Hygienists (Clinical Component Course)	University of Alberta, Faculty of Dentistry	Edmonton, AB	(403) 492-5023
29	The Dentist and Ethical Decision Making, — Dr. Nuala Kenny	Dalhousie University, Continuing Dental Education, Faculty of Dentistry	Halifax, NS	(902) 494-1674
29-30	The Changing Face of Temporomandibular Disorders	University of Alberta, Faculty of Dentistry	Edmonton, AB	(403) 492-5023
30	Everything You Wanted to Know About Street Drugs but Were Afraid to Ask — Dr. Hal Crossley	Dalhousie University, Continuing Dental Education, Faculty of Dentistry	Halifax, NS	(902) 494-1674
October				
14	Advanced Periodontal Instrumentation — Anna Matsuishi Pattison, RDH, MS	Dalhousie University, Continuing Dental Education, Faculty of Dentistry	Halifax, NS	(902) 494-1674
21	Basic Rescuer CPR and Airway Management: A Participation Program	University of Alberta, Faculty of Dentistry	Edmonton, AB	(403) 492-5023
28	Older Dental Patients: Clinical Challenges and Practical Approaches — Dr. Kenneth Shay	Dalhousie University, Continuing Dental Education, Faculty of Dentistry	Halifax, NS	(902) 494-1674
November				
23-25	13th International IFDH Symposium	International Federation of Dental Hygienists	Tokyo, Japan	

CDHA's Book of the Month Suggestions



July:

Going the Distance:

7 Steps to Personal Change

Rick Hansen and Dr. Joan Laub

1994, Douglas & McIntyre

ISBN #1550541196

August:

Healing Medicare

Michael B. Decter

1994, McGilligan Books, Toronto

ISBN #0969806418 (hard cover)

#096980640X (soft cover)



CALL FOR ABSTRACTS
Posters/Free Papers/Table Clinics

CANADIAN DENTAL HYGIENISTS ASSOCIATION
announces its

7th Annual Professional Conference

June 7-9, 1996
The Westin • Calgary, Alberta

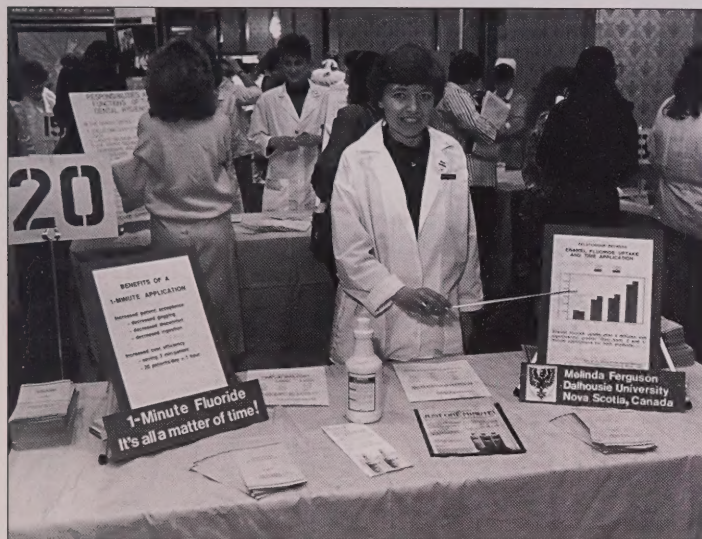
Submissions of abstracts for free papers, posters, and table clinic presentations which are related to any aspect of dental hygiene practice are invited. Your intent to submit an abstract, including your name and title of the abstract, must be made known to the CDHA Conference Co-ordinator by December 15, 1995.

The deadline for submissions of abstracts for free papers, posters and table clinics is February 1, 1996. Selection will be on the basis of the quality of abstracts. Notification to authors of accepted or rejected abstracts will be made by March 1, 1996. All selected abstracts will be published in the Conference Program.

Completed papers must be submitted by April 10, 1996 for potential publication in Probe, CDHA's scientific journal.

For additional information contact: CDHA Central Office, 96 Centrepointhe Dr., Nepean, ON K2G 6B1

WATCH FOR THE APPLICATION FORM IN THE NEXT ISSUE OF PROBE!



Melinda with her Table Clinic Presentation in Boston at the SHADA conference in 1988 where she received first prize for her presentation on 1-Minute Fluoride. The only Canadian participant, she was sponsored by Dalhousie University where she had just completed her dental hygiene degree. The presentation was subsequently published in PROBE.

Dental hygienists across Canada and in the United States have recently been exposed to a series of ads for PHD Services — in *PROBE*, *RDH* magazine, provincial newsletters and addressed ad mail. Avenues in continuing education are one of the many entrepreneurial opportunities available to dental hygienists especially as mandatory continuing education becomes more widespread.

The dental field is filled with journals and CE programs, but few focus primarily on the dental hygienist. To narrow the gap and make access to information easier, Melinda Ferguson settled down at her home computer and put together a collection of abstracts and summaries of dental hygiene related articles from a wide variety of sources. After circulating them among friends and colleagues across the country, the newsletter format took shape. Dental and dental hygiene boards were contacted regarding the granting of continuing education credit, academics were consulted to design a post-test, print costs were solicited from numerous printing establishments — then, the project was off the ground! The result: a bi-monthly newsletter of dental hygiene-related articles that qualify subscribers for CE credits in some provinces. PHD (Professional Hygiene Development) Services became a new branch of Melinda M. Ferguson Inc.

Melinda initially incorporated to gain more control over her time and become her own boss. Working on a contract basis, she provided dental hygiene services for dental colleagues. In some instances, she assumed complete responsibility for a private practice's dental hygiene department, through contract. In these cases, Melinda oversaw everything — paying the rent for the dental hygiene operations, buying the supplies used in the department, hiring, coordinating work schedules, paying the dental hygiene department staff and initiating the recall process — the works! By December 1994 she had four dental hygienists on her payroll. Word of mouth in the dental community has kept her busy ever since.

With a strong background in health sciences, a reputation as a professional student, a long history in desktop publishing and a desire to help colleagues, Melinda expanded her talents and began producing dental marketing materials for friends in 1993. Personalized client newsletters are becoming a popular item, as have new client brochures, post-treatment sheets and customized charts. Customized letters are also a popular request. Another common request is for literature searches on new topics, products, procedures and techniques. Melinda's publishing background includes producing high school newspapers, university papers, year-books, community guides, a year as editor of the Nova Scotia Dental Hygienist Association's (NSDHA) newsletter and now PHD Services Newsletter.

Already an independent contractor, Melinda was no stranger to the volume of paperwork involved in running one's own business. Nor to the satisfaction of bringing a vague idea to a reality, especially when it involved helping her colleagues. Typically, Melinda's week consists of two to three days of clinical dental hygiene practice, and two days at the computer and visiting with dentists who are clients.

"Working for yourself isn't always as rosy as it first appears — there's the bureaucracy and paper work, PST and GST, Corporate taxes, Employee payroll, payroll deductions and employer contributions, WCB payments, vacation pay, sick time, T4s, separation slips, contracts, quotes, estimates...the paper work is endless." But, on the positive side, there is really no end to the possibilities for further development! Exceptional organizational skills and confidentiality are musts. Finding the right people to work with has been the most difficult task because in the end, you're ultimately responsible for everything they do and don't do.

(Cont'd on page 148)

The biggest benefit of working for yourself is definitely the personal satisfaction of a job well done and the freedom to set your own work schedule. While her typical workday exceeds eight hours, Melinda manages to take a week every month to relax, travel and visit friends. Since January 1995 she has been to Montreal, William's Lake, Calgary, Toronto, North Bay, Quebec City and home to Nova Scotia. Every couple of years she is also able to take a sabbatical of a few months to explore some new locale. While currently on sabbatical, Melinda is working on some new continuing education ideas. With a little luck, and hard work, you'll hear about them shortly after she returns to her home office in the fall.

Would she give up the clinical? "Not a chance. It keeps me in touch with the realities of dental hygiene and dentistry. It also provides a great arena to collect new ideas in terms of client education that can be applied to the marketing aspect of my work. It's also where I make a lot of contacts for various volunteer projects I've become involved with."

"Dental Hygiene is a great profession with unlimited possibilities — private practice, institutional and educational settings, public health, administrative roles, research, marketing, sales, even publishing!"



A sampling of the materials produced by Melinda M. Ferguson Inc.



Melinda Ferguson is a Registered Dental Hygienist in Nova Scotia and British Columbia. She graduated with her BSc from St. Francis Xavier University in Antigonish, NS in 1984. After working as a dental assistant and receptionist she returned to study Dental Hygiene at Dalhousie University in Halifax, NS. Graduating from the program in 1988, she entered private practice in Antigonish where she remained until leaving for Australia in 1991. On her return, she settled in Vancouver, BC where she has established her current business.

P.H.D. SERVICES

Volume 2, Number 1, 1995

Professional Hygiene Development Services

Perfect Instrumentation Can Be Hazardous!

One of the most common occupational hazards of the hygiene profession is carpal tunnel syndrome (CTS). CTS is related to a gender-specific wrist ratio. "Other factors that predispose individuals to cumulative wrist trauma, (according to the authors), is pregnancy, initiation of oral contraceptive therapy, premenstrual syndrome, middle-age (in females), or any of a number of systemic diseases."

"The repetitive wrist motions basic to hygiene practice pose significant risk to clinicians."

"Contributory factors include movements in which the wrist is caused to digress from the neutral straight position, and working for too long a period without respite for the wrist. Additional factors include frequent repetitive wrist and forearm motion, sustained 'pinch' positioning of the hand (thumb, index, and middle fingers together); use of the wrist and hand in awkward positions; mechanical stresses to digital nerves, from sustained grasp or serrated handles and contact with the handle on the radial aspect of the index finger; vibratory instruments, especially small hand tools; and pulsing motions."

From a preventive point of view, a rocking motion which causes the wrist to bend as much as 90° is not the way to maintain the neutral wrist. Digital motion should also be limited. First and foremost, make every effort to maintain the wrist in a normal, neutral position. The wrist should not exceed the functional optimum of 10° flexion to 35° extension. The best motion for hand instrument activation seems to

be a rotation motion using a secure hand tissue fulcrum and moving the hand, wrist, and forearm as a unit to supply the necessary action. "Let the little finger go ahead and point up, (contrary to what we were told in dental school). "When you hold your instrument with the little finger down against the ring finger in the usual position, the hypothenar eminence is tight. This contraction is helping to stabilize the hand by contracting all the muscles under your little finger. These tight muscles are raising the

pressure in the palm and carpal tunnel just by being in isometric contraction."

"By tightening the pressure of the little finger on the back of the hand, instead of the hypothenar eminence, we stabilize that side of the hand. But since this muscle runs along the back of the hand and not through the palm, it does not increase the pressure in the palm or carpal tunnel."

[Continued page 12 "Occupational Hazards"]

Effect of Sterilization on Curette Blades

Stach, Poline, Newman and Tillias examined the effect of repeated instrument cleaning and sterilization on the surface/cutting edge of stainless steel and carbon steel curettes. The instruments were photographed with scanning electron microscope (SEM) at 200X and 1000X for baseline and after 2,4,8,16 and 32 treatment cycles.

Changes observed included surface pitting, corrosion products as additions to the surface, edge deterioration, and loss of structure.

"With stainless steel curettes, ultrasonic cleanings or sterilization with autoclave or chemicide can be used without visibly affecting the cutting edge. With carbon steel instruments, chemicide is the least damaging sterilization method followed by anti-corrosive treatment before autoclaving. Use of the autoclave without the anti-corrosive pretreatment or use of an ultrasonic cleaner negatively affects the integrity of the surface and cutting edge."

[Dent Hyg 1995; 68(1):31-39]

INSIDE:

SUPPATE

Electronic Probing 2

Removal of Endosteum 2

Electronic Anesthesia 2

Painless & Tissueless Tx 2

Isolation 2

P. in Bedside Water 3

Hypnotherapy & Children 3

Reaction to Dental Gear 3

Ray Caps 4

Xyloids 4

Tooth come out at night! 4

It's the Smiling 4

CROSSING BORDERS 4

MEDICAL MANAGEMENT

Oral Sarcoidosis 5

Wasserman's Syndrome 5

NUP as a Marker for AIDS 5

Sjögren's Syndrome 6

Vitamins C 6

Latex Allergy 7

Latex & Spina bifida 7

SCINICAL

Pain & Age 8

Salivary Glands & Caries 8

Physical Contact 8

Neurotic Blotter 8

Toothbrush "Alert" 10

Plaque Removal 10

Ultrasonic Toothbrush 10

Children's brushes 10

PRACTICE MANAGEMENT

Team Management 9

Professional Image 9

FREE FOR THE ASKING 11

WIND NOTES 12

P.H.D. Services/Volume 2, Number 1

A sample of Melinda's new newsletter for dental hygienists.



DEAR HYGIENISTS

The Canadian Straight Wire and Functional Program will be conducting a very unique two-day course that will review the following subjects:

- General Orthodontics
- Banding and Bracketing
- Instrumentation
- Auxiliary Supplies and
- Cephalometric Landmarks and Tracing

Date: Sept. 22, 23, 24 1995

Tuition: \$495

For more information please call

Julia Phibbs

Program Coordinator

at 1-800-265-1307

Dental Hygiene Students Open The Doors



First Prize was awarded to Cheryl Jacquard and Julie Dort for their work on "Carpal Tunnel Syndrome: An Occupational Hazard", a clinic with colourful pictures, diagrams and models that provided an explanation of the etiology, treatment and prognosis of this disease. Second prize was awarded to Stacy Bendict and Shauna Deveaux for their study on toothbrushes entitled, "Which Brush? It's a Matter of Choice". This clinic was a consumer report on which aspects of toothbrushes influenced consumer choice and preference. Third place went to Denise Thibault and Steve Cameron for their entry entitled, "To See or Not To See — The Importance of Protective Eye Wear".

The busy schedule of dental professionals makes it very difficult to keep abreast of new developments in the dental field. Similarly, the public rarely receives an unbiased professional view of new products and procedures. Both of these issues were tackled by the Annual Dalhousie University Faculty of Dentistry Table Clinic Presentations held in Halifax, NS in January 1995. Every year, second year dental hygiene students present projects dealing with a wide range of topics directed at the dental and general community. This year's event was attended by many people, keeping students busy from 2 pm to 9 pm, answering questions and defending their studies. Eighteen presentations were on the agenda:

Chlorzoin: Too Good to be True? — an unbiased evaluation of procedures and efficacy of chlorzoin.

Hepatitis: A Silent Killer — an informative study on the infectious nature of hepatitis.

Is Whiter Better? Dental Bleaching and Whitening Agents — a look at possible harmful effects of bleaching teeth on enamel and periodontium.

Behavioural Management in Children Age 0-10 — an insight into the effectiveness of various techniques.

Fear Assessment in Elementary School Children — A comparison in the level of fear of visiting a dental office between children in grades K-6.

Xerostomia: A Dry Topic? — a study on the causes, effects and treatment of dry mouth to increase dental awareness.

Dental Hygiene Self-Regulation: An Educational Perspective — a study exploring popular misconceptions of self-regulation as it applies to dental hygiene.

Hypnosis — Beyond Reveen — using hypnosis for control of anxiety and dental fears.

Chlorhexadine and Fluoride Combination Therapy — an examination of antibacterial and anticarcinogenic mouth rinses as an adjunct to oral hygiene.

Juvenile Periodontal Disease: You're Never Too Young to Start — a project dealing with the etiology and difficulties in early diagnosis.

The "Sonic Boom" — a comparison of sonic, magnetostrictive and piezoelectric scalers in effectiveness of treating periodontal disease.

Neck and Back Problems in the Dental Profession — a study dealing with common ailments of the dental profession and their prevention and treatment.

Fluoride: Too Much of a Good Thing? — an inquiry into the efficacy, sources and levels of concentration of fluorides required to cause fluorosis.

Smoking Associated Periodontitis — a report on risk factors of smoking on the development and treatment of Periodontitis.

Professional Fluorides: Popularity vs Efficacy — a study looking at various types of fluorides applied in the dental office.

First place winners received complimentary accommodation at this year's CDHA Annual Conference provided by the Dalhousie Dental Hygiene Students' Society. It marks the first time the Society became involved in the clinic presentations. Members of the Dalhousie Dental Hygiene Society recommend and challenge other student societies to offer similar rewards at their symposiums.

submitted by Steve Cameron, second year dental hygiene student, Dalhousie University, School of Dental Hygiene



Algonquin College dental hygiene students Linda Roth, Lin Smith, Sue Noble and Winnette MacPherson grouped together to develop a table clinic on "the first dental visit". The dental background backboard and cookie monster client idea came to mind when they focused on their target audience: 2-5 year olds. Based on the active participation and the expressed conviction of two of the children to grow up and be dental hygienists, the students felt the table clinic was a huge success!

Use of Tetracycline Fibre to Treat Localized Unstable Periodontitis

By: *Leanne D. Carlson-Mann, Dip DT, Dip DH*

Tetracycline fibre cords will be introduced in Canada in January 1996. Presently it is used in the United States and the placement of the fibres is included within the dental hygienists's scope of practice in many states. Dental Hygienists in each province may want to request that this procedure be added to the list of duties they may perform

within their scope of practice. (Although tetracycline cords are not yet available in Canada, some offices have been permitted to use these products on a trial basis. Presuming they will soon be available in Canada, the author suggests they would be a valuable adjunct in periodontal therapy.)

History

A 50-year old female suffered from severe generalized periodontitis whose initial therapy included scaling and root planing and full mouth periodontal surgery (gingivectomy and limited osseous surgery). After completion of the active therapy she was placed on

a four-month supportive periodontal therapy (recall). Treatment during the continuing care appointments included scaling and root planing, selective polishing and a review of self-care if needed. A satisfactory level of oral hygiene was evident over many years. At a recent continuing care appointment, a 7 mm suppurating pocket was observed mesial of tooth #43.



Area before treatment.

Examination

The client was in good general health and had complied with regular four-month continuing care appointments. Although no calculus or root roughness could be determined the area was debrided but the tissue did not respond. At the time of acute episode BANA testing revealed a positive anaerobic infection.

The BANA acronym refers to the synthetic peptide bensyl-DL-arginine-naphthylamide. The BANA test hydrolyzes this enzyme. It is a simple, rapid and economical chairside diagnostic tool that some clinicians find advantageous to use in identifying periodontal pathogens. The test can be performed by dental hygienists and the process involves sampling subgingival bacterial plaque that is removed from the sulcus with a curette. The sample is placed on a test strip that is then moistened and placed in a BANA incubator for a specified time period. A colour change indicates a positive test result.

Treatment of Choice

Current scientific evidence indicates that tetracycline fibres are indicated in the treatment of periodontal infections where normal debridement procedures and surgery have failed to control the ongoing infection.

The tetracycline fibre maximizes the antibacterial effect while minimizing drug-related side effects. Recommended uses:

- Control of localized inflammation and infection in spite of root instrumentation and plaque control.
- Optimal control of periodontitis before regenerative surgical procedures.
- Control of refractory cases during maintenance.



Tetracycline cord (note that this is a different case utilizing picture to illustrate cord).

Contraindications:

- Clients with poor self care who do not comply with regular continuing care appointments.
- Allergies to the tetracycline.
- Allergies to the cyanoacrylate used in the procedure.
- Immuno compromised clients are susceptible to infection related to overgrowth of fibre resistant bacteria or candida.
- Pregnant or lactating women.
- Has not been tested on children.

Because the lesion occurred in the presence of good oral hygiene and root planing, the treatment option selected was to place a tetracycline cord. If more than one tooth was involved, a surgical approach instead of the fibre placement would have been considered. One policy is to treat the initial disease aggressively. However, if self-care is good and the client complies with continuing care appointments, usually a more conservative approach is attempted.



Tetracycline cord being placed in sulcular area with a cord packer.

Procedure and Discussion

A tetracycline fibre was positioned to loosely fit the periodontal pocket on mesial of tooth #43. (This procedure may be performed by a dental hygienist in the United States.) The cord is completely submerged into the perio pocket and then secured with cyanoacrylate and periodontal packing. At a seven-day fibre removal appointment, the suppuration had resolved. At a two-month follow-up appointment, the probing depth was 4 mm with no evidence of inflammation or active periodontal pathogens. A continuing care program was then established at three month intervals for the client at which time the probing depth would be monitored.

Conclusion

Despite all other surgical and non-surgical treatments available, some cases may require some form of antibiotic therapy to shift microflora. By shifting the balance of the microflora we are altering a diseased state so it becomes a healthy state. Shifting the microflora with the tetracycline fibre performs the same function as systemic antibiotic treatment. In other words, it creates a different bacterial



Area after treatment.

balance. However, the advantage of using this method is that it is site-specific. When placed on systemic tetracycline some clients must then alter their diet to avoid calcium products. Others experience intestinal problems; these complications are avoided by using the tetracycline fibre treatment. The tetracycline cord offers a more exact treatment, treating only the area affected. The fibre maintains a constant level of medication for seven days. Furthermore, use of the tetracycline cord also appears to eliminate re-treatment.

Bacterial testing may be advantageous prior to fibre placement. It is an easy-to-use chairside diagnostic tool that enables one to better understand the bacteria one is dealing with, thereby allowing one to plan appropriate treatment. The clinician should carefully consider each client's periodontal condition before choosing a treatment option because in some cases it may be too aggressive.

Although the fibre shows some exciting results, it is important to keep in mind that rather than thinking of it as a "magic bullet", it is simply another tool in the armamentarium of treating periodontal disease.

Leanne received her diploma in Dental Therapy in 1981 and a diploma in Dental Hygiene in 1982 from WIAAS in Regina, Sask. She has been employed with Dr. C.G. Ibbott, a periodontist in Regina, since graduation. Leanne received her dental implant training at the University of Washington in 1988 and has been extensively involved with implant procedures. As well as teaching and providing continuing education courses (primarily in Western Canada), Leanne teaches a dental implant class to the second year dental hygiene students at SIAST. For the past two years students received an accredited hands-on prosthetic course in cooperation with Nobelpharma. Leanne has published a number of articles in *PROBE*, the *CDA Journal* as well as co-authoring articles for various international journals and she was recently hired by 3i Implant Innovations to lecture in Canada and the U.S.

Case Studies are presented for the interest of our members. However, CDHA is not endorsing any specific interventions.

We welcome submissions of this nature from our members to encourage an exchange of information.

CANADIAN ASSOCIATION OF ORTHODONTISTS

47th Annual Scientific Session
September 15-16, 1995
Chateau Laurier Hotel
Ottawa, ON

ORTHODONTIC PROGRAM: A review and update of the orthodontic fundamentals of diagnosis, treatment planning and treatment techniques.

Dr. Michael Patrician, orthodontic lecturer for the Ontario Dental Association and University of Toronto, will speak on "Orthodontics: Why We Do What We Do?"

Dr. Samuel Kucey, President of the Canadian Association of Oral and Maxillofacial Surgeons, will speak on today's most commonly used orthognathic surgery procedures. Special emphasis will be given to pre- and post-surgery patient protocol. Dale Scanlan, RDH will join Dr. Kucey in the afternoon to review cleft palate patient treatment in addition to other current oral and maxillofacial procedures relating to orthodontics.

David Chilton, author of the *Wealthy Barber*, will also speak. Mini-courses on cephalometric tracing, orthodontic photography and retainer fabrication will be offered throughout the session.

For registration information, please contact:

Canadian Association of Orthodontists
 2175 Sheppard Ave. East, Ste 310
 Willowdale, ON M2J 1W8
 Phone: (416) 491-3186
 Fax: (416) 491-1670

Southern B.C.

Second Full-time Dental Hygienist wanted for busy practice in southern British Columbia. Send resumé to

PO Box 2580, Creston, BC V0B 1G0

Fort Smith, NWT

Caring, conscientious dental hygienist required beginning of July to take over our growing soft tissue management programme. Ours is a progressive, family practice with a strong bias to prevention, situated in the beautiful northern wild, but with easy access to major centres.

Please phone (403) 872-2044
 or send resumé to: Box 1047, Fort Smith, NWT X0E 0P0

Hygienist Wanted

for a family practice in Cranbrook, B.C.
 Beautiful community, new facility, excellent staff,
 great working environment.
 Please call Pearl for details

(604) 489-4551
 or Fax (604) 489-4871



EXCITING CAREER OPPORTUNITY FOR DOCTORS & HYGIENISTS

The Nation's Leader in Advanced Hygiene Education has created two new part-time positions. If you possess excellent interpersonal skills, you are open to travel and have a flex. sched. we want to talk with you about a future with us. Min. 3 yrs. exper. as a practicing RDH or DDS lic. in Ont. is required (B.C. & U.S. credentials helpful). If you have participated in any communication courses preference will be given to you.

Please send C.V. and H.W. cover letter to:

PERIO POWERDONTICS™,
 Box 2243, 4950 Yonge St.,
 North York, Ont. M2N 6K1
 by Aug. 20/95 (No calls Pls)

Dental Hygienist Wanted

Come and join us in the magical Queen Charlotte Islands of B.C.

Just an hour flight from Vancouver, you can enjoy our healthy lifestyle of kayaking, hiking and world class fishing in a stress-free and pollution-free environment. Our modern 5 unit office is fully computerized and has a Statim handpiece sterilizer for a

6 minute turn around. Your room has its own computer monitor, cavimed cavitron, and new x-ray unit.

There's great pay and a staff that is more like family.

Come and have some fun with us in this sweet seaside community that really needs **you**.

Call us collect: days-speak with Leslie or Joanne
 or leave a message at **604-559-8384**

evenings — speak with Dean
 at **604-559-4636**
 fax — 604-559-8820

Dean H. Nomura, D.D.S.

P.O. Box 1000, Queen Charlotte City, B.C. V0T 1S0

Dental Hygienist Wanted

Starting September 15, 1995

Four days per week — \$200 per day,
 6-8 clients per day, small town practice.

Four-hour drive to Jasper.

Snowboarder preferred.

Some relocation assistance available.

You must qualify to have your Alberta Licence.
 Send CV to Box 539, Beaverlodge, AB T0H 0C0
 or call (403) 354-2174, leave message.

for you and your patients

Start Predicting The Future.



*P*redictive and preventive care. It's the future of dentistry. And it's a promising future for your patients.

Introducing the Bana Test. A simple, painless, site-specific and objective test for periodontal pathogens.

Bleeding on probing. Measuring pocket depths. The observation of inflammation. All effective methods in detecting the existence of periodontitis. Bana goes further.

After just minutes of incubation, the patented Bana Reagent Strip provides answers for periodontal situations that, until now, were difficult to diagnose. What is the best treatment and how often should treatment be provided. Which patients are refractory. Which patients will suffer bone loss. The information most often requested by third party payers.

Administered chairside, Bana's proven method of detection is the most reliable and economical test on the market today.

In fact, Bana is well within the fee guides of Provincial dental codes.

Call Knowell today for a no-cost, in-office presentation of the Bana Test. And tomorrow you can start predicting the future.

1-800-463-2999

Knowell is an all-Canadian pharmaceutical company dedicated to empowering the dental care provider for the "new realities" of less insurance, more effective prevention, and more patient input.



BanaTM TEST

The World's Most Published Perio Test.

KnowellTM
Advancing Dentistry.

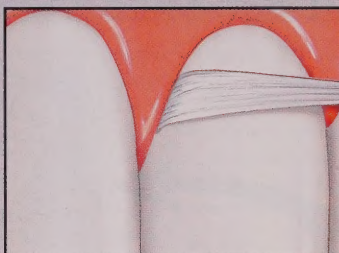
BUTLERWEAVE™ FLOSS

The Latest Addition To Our Floss Line

WIDE LIKE A TAPE



Introducing ButlerWeave™ the *Spreadable* dental floss. In sulcular and interproximal areas, ButlerWeave™ spreads out, so it covers like a dental tape, to clean and remove plaque effectively.



THIN LIKE A FLOSS



With its thin, flat profile, ButlerWeave™ easily glides between tight contacts, and cleans those often-missed spaces between teeth and gingiva.

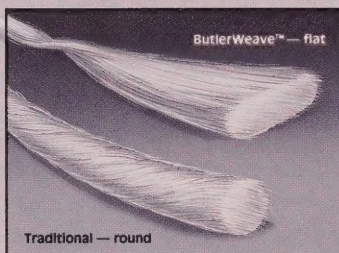


UNIQUE BUTLERWEAVE™



ButlerWeave's unique "Interlacing" process produces a Strong, Smooth, Shred-resistant floss, — an innovation that makes flossing easy, comfortable, and effective.

Available in unwaxed, waxed, and mint waxed.



ButlerWeave™ The floss that cleans like a dental tape.

JOHN O. BUTLER COMPANY,
515 GOVERNORS ROAD, GUELPH, ONTARIO N1K 1C7
ACROSS CANADA: 1.800.265.8353
SERVICE EN FRANÇAIS: 1.800.265.7203

BUTLER
 **G·U·M**®
For Strong Healthy Teeth That Last.

Dent

The Canadian Dental Hygienists Association

PROBE

JOURNAL

de l'association canadienne des hygiénistes dentaires

September '95 v.2

Inequalities in Health



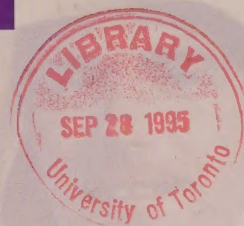
Conference '95 Highlights

HALIFAX

Sixth Annual Professional Conference

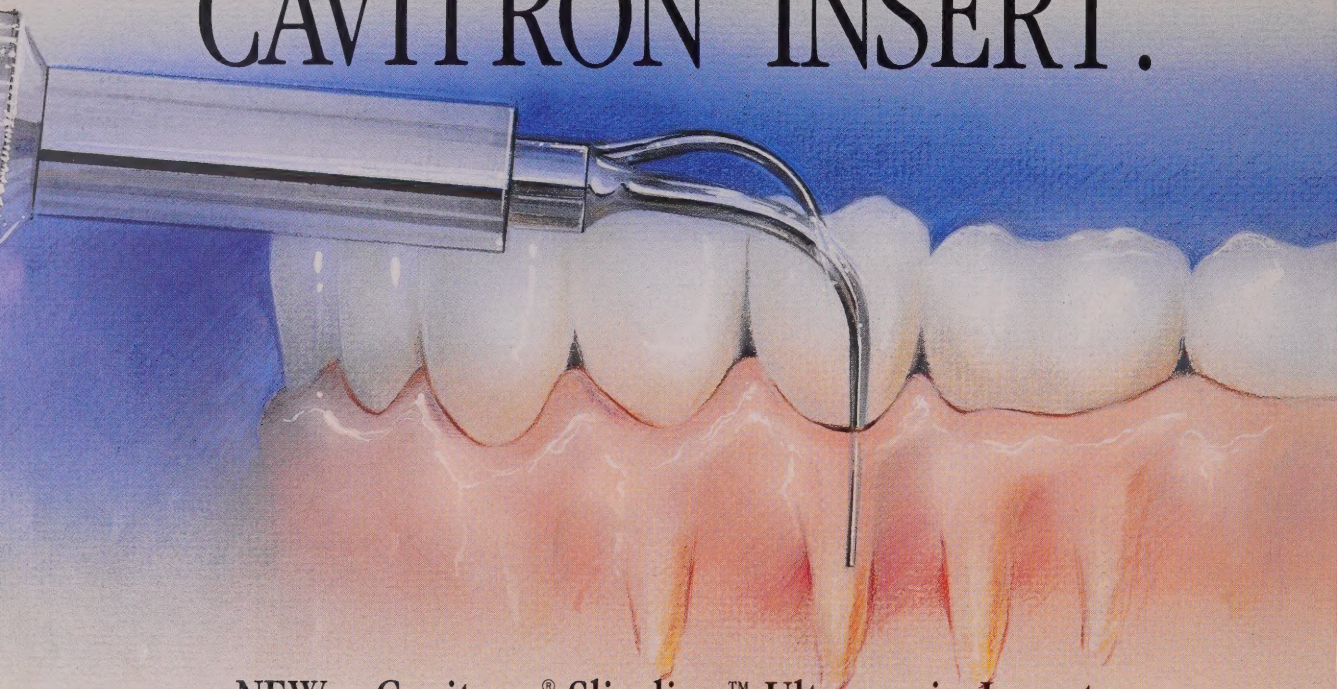
Oral Care Report Supplement

UNIV OF TORONTO LIBRARY
SERIALS DEPARTMENT
TORONTO, ON
CANADA, M5S 1A5



DENTAL LIBRARY
UNIVERSITY OF TORONTO
124 EDWARD ST.
TORONTO M5G 1G6
ONTARIO, CANADA

"I NEED A THINNER CAVITRON® INSERT."



NEW...Cavitron® Slimline™ Ultrasonic Inserts.

- 40% thinner than our standard inserts.
- Probe-like size and feel for easier insertion and exploration.
- Allow ultrasonic instrumentation to depths of up to 7mm.
- Require less soft tissue manipulation so patients are more comfortable.
- Thorough water lavage from external water tube.

With Slimline Inserts on your tray, you gain greater tactile feel, deeper subgingival access and improved patient comfort. Available in straight, right and left styles in 25K or 30K.

To order these innovative new Slimline Inserts, or receive additional information, contact your authorized DENTSPLY Canada Equipment Distributor or call 1-800-263-1437

SLIMLINE™

DENTSPLY
CANADA

161 Vinyl Court, Woodbridge, Ontario L4L 4A3 1-800-263-1437

CDHA Honours Its Own

On Sunday, June 25, CDHA's 6th Annual Professional Conference came to an end on a high note. To highlight volunteer efforts and member achievements with the general membership, the Association included its Annual Awards event on the conference agenda. Conference participants crowded into the Sheraton Halifax Ballroom to acknowledge and pay tribute to individuals who have made enormous contributions to the dental hygiene profession over the years.

During the Awards Luncheon, CDHA President Maxine Borowko reflected on the Association's numerous achievements over the past year, including the CDHA Endowment Fund, the Association's purchase of a new building, the continued growth in CDHA membership, the establishment of self-regulation in British Columbia (and movements "forward and beyond" this issue in other provinces), the development of a new and improved insurance package for CDHA members, and the development of inclusive practice standards for the profession not limited to clinical practice.

To show her appreciation for Executive Council's support during her term as president, she presented each council member with an RDH key and gave her interpretation of what the letters 'RDH' represented for each of the individuals: "For Fran Richardson (Past President) it could stand for 'Registrar of Dental Hygiene' (Fran is Registrar of the College of Dental Hygienists of Ontario), or even 'Recycled Dental Hygienist', as she so often claims, but for me it stands for 'Revolutionary Dental Hygienist' because Fran has proudly cut the path in so many areas of dental hygiene practice. For Sue MacIntosh (Vice President), RDH could easily represent 'Really Daring Hygienist' having presented a message in French during a recent visit to New Brunswick, but to me it represents 'Roving Dental Hygienist', thanks to Sue all Atlantic provinces in addition to Saskatchewan, Manitoba and Ontario had the pleasure of her presence this past year. For Carol Matheson Worobey (CDHA Executive Director), RDH could stand for 'Red-headed Dental Hygienist' (but you can't count on that) or 'Radiant Dental Hygienist' as she certainly lights up a room. But for me she's a 'Revitalizing Director of Hygiene' helping to energize and revitalize individual dental hygienists and the Board on a continual basis. Now, for Marnie (President-Elect) I heard that Dentistry, for instance, thinks of her as a 'Radical Dental Hygienist', and they would probably be happier if she were a 'Retired Dental Hygienist', but she's not. In fact, she's so versatile, that for her the letters work both ways RDH and HDR as she is an Honorary Doctor.

Following the President's Remarks, Gail Bemis, President of the American Dental Hygienists Association brought greetings, noting that "CDHA is power personified". Award presentations made during the luncheon included the presentation of the AquaFresh Student Scholarship Awards to Leonard Serfaty, a second year dental hygiene student at the University of Manitoba and Steve Cameron, a second year dental hygiene student at Dalhousie. Dentistry Canada Fund (DCF) Executive Vice President James Wegg presented final payment

of the financial grant (a total grant of \$3,500 was awarded by DCF), to Bonnie Craig, Chair of CDHA's Professional Development Council, to cover costs related to the development of new Dental Hygiene Education Standards.

Mary Ann Hayes, Executive Director of the British Columbia Dental Hygienists Association accepted a plaque on behalf of the College of Dental Hygienists of British Columbia recognizing the establishment of the new college and the achievement of dental hygiene self-regulation in British Columbia.

The Association also presented past president pins to CDHA Past President's from the Atlantic region including Audrey Newcombe of Charlottetown, PEI, who served as President from 1985/86, Mary Pelletier of Moncton, NB (1983/84) and Patricia Grant of Halifax, NS (1981/82).

The final presentation of the day was that of the CDHA Distinguished Service Award presented to Marilyn Goulding of Fort Erie, ON for her outstanding contributions to the profession. Marilyn served as Scientific Editor of *Probe* for more than five years. She is the 12th individual to receive this award in CDHA's 32-year history.

During the luncheon it was announced that this year's winner of the CDHA Dental Hygiene Research Grant is Ellen Brownstone of Winnipeg. Ellen, who is currently completing her PhD studies at the University of Manitoba is conducting research on the culture of dental hygiene.

Top: Former *Probe* Scientific Editor, Marilyn Goulding, accepts CDHA's Distinguished Service Award from Past President Fran Richardson.

Centre: Mary Ann Hayes [left], Executive Director of the British Columbia Dental Hygienists Association, accepts a plaque on behalf of the College of Dental Hygienists of British Columbia presented by CDHA's Practice and Regulation Council Chair Judy Clarke.

Bottom: AquaFresh scholarship winners, Steve Cameron [left] and Leonard Serfaty.



LISTERINE*

FIGHTS GINGIVITIS

AS EFFECTIVELY

AS CHLORHEXIDINE.



* "Listerine helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care." CANADIAN DENTAL ASSOCIATION † Gingivitis was evaluated using the Modified Gingival Index. Listerine: Do not swallow. Not to be used by children under 12 years of age. Keep out of reach of children.

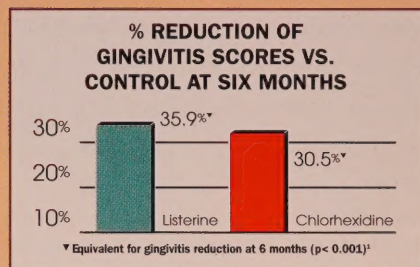
† TM Warner-Lambert Company Warner-Welcomme Inc. use Scarborough, Ontario M1L 2N3.

1. Overholser CD et al. Comparative effects of two chemotherapeutic mouthrinses on the development of supragingival dental plaque and gingivitis. J Clin Periodontol 1990;17:579-579.

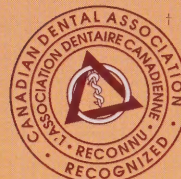
2. Data on file, 1995.

PAAB

A recent clinical study¹ concluded that Listerine inhibited the development of gingivitis[†] as effectively as 0.12% chlorhexidine. In fact, Listerine reduced the development of gingivitis by almost 36% over brushing and flossing alone¹.



Unlike chlorhexidine, Listerine works without causing side effects like extrinsic tooth stain¹. Listerine is the only oral rinse, prescription or nonprescription, to receive the Canadian Dental Association's seal of recognition for efficacy in the reduction of plaque and gingivitis².



Twice daily rinsing with Listerine works synergistically with brushing, flossing and your professional care¹. If you'd like to find out more about Listerine call 1-800-683-1650. We'll give you all the facts.



**LISTERINE FIGHTS GINGIVITIS
WITHOUT STAINING**

CONTENTS

157 EDITORIAL - SPECIAL REPORT

CDHA Honours Its Own

161 PRESIDENT'S MESSAGE

PSR Is Launched in Canada

163 NEWS

166 SCIENTIFIC

Health & Socio-economic Inequalities

By Roger Roberge, Jean-Marie Berthelot
and Michael Wolfson

170 ANNOTATED BIBLIOGRAPHIES

A Review of Oral Fungal Infections and
Appropriate Therapy

Prepared by Carol Barr Overholt, Dip DH

FEATURES

171 Conference '95 - Halifax, NS, June 23-25

175 Meeting the Needs of Under-served
Communities: One University's
Externship Experiment

By Olva Odum, DDS

178 Wilkins 7th Edition - A Companion for
Every Dental Hygienist

Reviewed by Nancy Vincent, Dip DH

180 BOOK REVIEWS

Canada's Health Care System:
Bordering on the Possible

Reviewed by Joanne Clovis, Dip DH, BEd, MSc



COVER:

CONFERENCE '95

- Lynda McKeown Mickelson
CDHO President moderates
self-regulation panel discussion
- Glenda Butt questions keynote
speaker, Dr. Jane Fulton

(Photos by Treena Biddington, Halifax)



182 CONTINUING EDUCATION

184 SELF-ASSESSMENT TEST

Dental Hygiene Care for Individuals with
Special Needs

Prepared by Sue Raynak, Dip DH

185 SPECIAL UPDATE

Guidelines for Supportive
Periodontal Therapy

Prepared by Leanne D. Carlson-Mann,
Dip DT, Dip DH

188 CLASSIFIEDS

EDITORIAL DIRECTOR/SCIENTIFIC EDITOR: D. Landry,
Dip DH, Dip DN, BA, BV/T Ed
MANAGING EDITOR: J. Edgar, BJ
STATISTICAL REVIEWER: R. Dunford, BSc, MSc
CONTRIBUTORS

Carol Barr Overholt, Dip DH
Leanne Carlson-Mann, Dip DT, Dip DH
Nancy Neish, BA, Dip DH, MEd
Brenda Fortune, Dip DH

EDITORIAL BOARD

E. Brownstone, BA, Dip DH, MEd
S. Amer, Dip DH, MS
L. Boomhour, Dip DH
M. Goulding, Dip DH, BSc
L. Guest, Dip DH, BHE

DESIGN: Edels-Marcotte

Published six times a year by the Canadian Dental Hygienists
Association, 96 Centrepoin Drive, Nepean, Ontario K2G 6B1
Tel (613) 224-5515

Canada Post Publications Mail Registration No. 5793

CANADIAN POSTMASTER: Notice of change of address and
undeliverables should be sent to:

Canadian Dental Hygienists Association
96 Centrepoin Drive,
Nepean, ON K2G 6B1

Subscriptions \$69.55 (GST Included) in Canada, \$110.00 Cdn
for US & \$115.00 Cdn elsewhere. Fifty cents per issue is allocated
from membership fees for journal production. All statements are
those of the authors and do not necessarily represent CDHA, its
executive, or its staff.

ADVERTISING AND SUBSCRIPTIONS:

Keith Health Care Communications
1382 Hurontario St.
Mississauga, ON L5G 3H4
(905) 278-6700

CDHA 1995
6176 CN ISSN 0 834-1494
GST Registration No. R106845233

CDHA CENTRAL OFFICE STAFF

Executive Director: Carol Matheson Worobey
Manager, Publications & Conference: Janice Edgar
Financial Coordinator: Monique B. Rock
Member Services Coordinator: Sandra Vanwart
Member Services Assistant: Sue Turcotte
Administrative Assistant: Donna Awrey

All CDHA members are invited to call CDHA's Central Office
toll-free, with their questions/inquiries:

1-800-267-5235, Fax (613) 224-7283

We look forward to serving you.

The Canadian Dental Hygienists Association's Journal, *Probe*, is the
official publication of CDHA. CDHA invites submissions of original
research, discussion papers, and statements of opinions pertinent
to the dental hygiene profession. All manuscripts are refereed anonymously. Contributions to *Probe* do not necessarily represent the
views of the CDHA, nor can CDHA guarantee the authenticity of
the reported research. Copyright 1995. All materials subject to this
copyright may be photocopied for the non-commercial purpose of
scientific or educational advancement.

Probe for Results.

The CDA and CAP announce PSR.

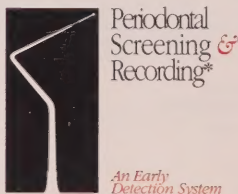
- Periodontal Screening & Recording helps market periodontal health in your practice

% Increase Among PSR Adopters Versus Non-Adopters

1994 Total GP Dentists Aware of PSR



- PSR is proven to increase practice productivity, compliance and patient recall
- PSR is a simple, rapid *and* cost-effective method of screening for periodontal disease
- PSR is the *only* periodontal screening system endorsed by the CDA and CAP



Brought to you by
The Canadian Dental Association and
The Canadian Academy of Periodontology

Sponsored by the makers of
Crest & **PERIDEX**

* PSR and Periodontal Screening & Recording are trademarks of the Canadian Dental Association.

† Crest is a trademark of Procter & Gamble Inc., Toronto, Ontario.

‡ Peridex is a trademark of the Procter & Gamble Company, Cincinnati, Ohio.

PSR is Launched in Canada

Initially, a few words about PSR. These are letters that Canadian dental hygienists are going to be hearing frequently in the next few months. Perhaps they are already familiar to you, either through publicity from the Canadian Dental Association or, if you happen to be a recent dental hygiene graduate, from your student days.

The initials stand for Periodontal Screening and Recording, a system of periodontal evaluation. When you learn more about it, you will recognize that the system is an adaptation of another familiar set of initials: CPITN, or the Community Periodontal Index of Treatment Needs. CPITN has, for some time, been endorsed by the World Health Organization (WHO) and the Fédération Dentaire Internationale (FDI). It has been used primarily for epidemiological purposes, to estimate the extent and severity of periodontal disease in a population.

PSR is an effective and efficient way to screen for, and record, the levels of periodontal disease in clients that dental hygienists and dentists see in practice. It is a simple system which will save time over the previously used system. The latter required the complete recording of six crevice readings for every tooth, with PSR there is one score recorded for each sextant in the screening examination. The simplicity is in the recording, not in the thoroughness of the examination. The practitioner benefits through the time saved, making it easier to incorporate a thorough periodontal screening for every adult client. The client benefits, obviously, by having a thorough and regular periodontal health evaluation, and a simple permanent record of its results included in his/her chart.

The PSR system has already been introduced in the United States, through the American Dental Association with the corporate sponsorship of Procter and Gamble. In Canada, the system is being introduced by the Canadian Dental Association and the Canadian Academy of Periodontology. Procter and Gamble is again providing significant corporate support, yet another example of that company's initiatives aimed at improving oral health.

The Canadian Dental Hygienists Association supports this initiative. Last year, CDHA President Maxine Borowko wrote to CDA President Bryun Sigfstead to offer any assistance possible in the promotion of PSR. Our

initiative resulted in a welcoming response not only from the CDA, but also from the Canadian Academy of Periodontology and Procter and Gamble. Carol Matheson Worobey, CDHA's Executive Director, has been attending CDA planning sessions, to determine how CDHA can best make a contribution to the program. In due time, you will be hearing more from your professional association about how you can learn more about PSR, and how it can be implemented in practice.

If the system is to have optimal effect for clients in dental practices, Canadian dental hygienists are going to have to be directly and continuously involved. After all, in the vast majority of cases, it will be dental hygienists who will be responsible for ensuring that the system is initiated and sustained. The prospects for improving the periodontal health of clients through ensuring regular thorough periodontal examinations and recording of the screening results are promising.

There is another aspect of PSR that illustrates something very important: it represents an opportunity for the national professional associations representing dental hygiene and dentistry to engage cooperatively in an activity of mutual interest which has the potential for improving the oral health of Canadians. It is by no means a unique opportunity, there are many other examples which can be cited — the work done by both groups on the Commission of Dental Accreditation of Canada, and many Dental Health Month activities for example. It is also true, however, that the relationship between the two national organizations sometimes seem to focus mainly on our differences. The differences are real and usually relate to issues that are important, such as self-regulation, or direct access by the public to dental hygiene care. They create tensions and anxieties and sometimes a "chilly climate", because dental hygienists and dentists view these issues differently.

We sometimes lose sight of the fact that what binds us together is far stronger and more important than our differences: our mutual mission to serve the Canadian public through efforts which improve health, and specifically oral health. Working together to make the Periodontal Screening and Recording system effective provides an occasion to work in harmony in a way which can result in improved periodontal health for our clients. It is an opportunity all should welcome.

Margery Forgay, Dip DH, BEd, MA, LLD

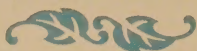


Dr. Margery (Marnie) Forgay earned her diploma in dental hygiene in 1952 at the Eastman Dental Dispensary in Rochester, New York. She also holds a Bachelor of Arts degree from the University of Saskatchewan and a Bachelor of Education degree from the University of Manitoba. In 1980 she completed her Masters of Arts degree at the University of British Columbia. In May 1994, Dalhousie University presented her with an Honourary Doctorate of Laws Degree. In March 1995 the University of Manitoba's Board of Governors appointed Dr. Forgay as "Professor Emerita". Marnie founded the University of Manitoba's School of Dental Hygiene in 1963 and provided 32 years of service to the School. She also served as Director of Dalhousie University's School of Dental Hygiene (1985-1990). Although now 'officially retired', she remains actively involved in the dental hygiene profession on numerous fronts.



1st Call for Abstracts

Posters/Oral Papers/Table Clinics



The Canadian Dental Hygienists Association announces its 7th Annual Professional Conference

INTERDEPENDENCE AND INDEPENDENCE: STRIKING A BALANCE

June 7-9, 1996

The Westin Hotel • Calgary, Alberta

Submissions of abstracts for free papers, posters and table clinic presentations which are related to any aspect of dental hygiene practice are invited. **Your intent to submit an abstract, including your name and title of the abstract, must be made known to the CDHA Conference Coordinator by December 15, 1995.**

The deadline for submissions of abstracts for free papers, posters and table clinics is **February 1, 1996**. Selection will be on the basis of the quality of abstracts. Notification of authors of accepted or rejected abstracts will be made by March 1, 1996. All selected abstracts will be published in the Conference Program.

Completed papers must be submitted by April 10, 1996 for potential publication in *Probe*, CDHA's scientific journal.

For additional information contact:
CDHA Central Office, 96 Centrepointe Dr., Nepean, ON K2G 6B1

Author should submit one copy of Appendix A by **February 1, 1996**.



CDHA Dental Hygiene Community Health Grant

OBJECTIVE: To support Canadian dental hygienists engaged in community health projects that promote oral health and wellness.

GENERAL DESCRIPTION: A grant of \$3000 will be awarded annually to a Canadian dental hygienist who presents a new community health initiative that is not associated with any other dental health delivery program. Preference will be given to community projects that are relevant to the discipline of dental hygiene and the mission and objectives of the CDHA. National Dental Hygiene Campaign projects/initiatives are not acceptable for this grant.

ELIGIBILITY: Grant applicants must be academically qualified Canadian dental hygienists who are active or life CDHA members in good standing. Dental hygiene experience of at least two (2) years is required.

APPLICATION DEADLINE: The deadline for applications is **December 15, 1995**.

DURATION: The recipient of the grant will be notified by March 1, 1996 and will have one year to complete the initiative. Upon completion of the initiative a written report is to be submitted to CDHA. CDHA reserves the right of first to publish all works generated as a result of the initiative. A successful applicant may re-apply a second consecutive year. Second applications will be considered on the same basis as any first applications. No more than two awards will be offered for any one initiative.

FOR MORE INFORMATION OR TO RECEIVE AN APPLICATION FORM CONTACT:

Canadian Dental Hygienists Association
96 Centrepointe Drive
Nepean, ON K2G 6B1
Phone: (613) 224-5515 Fax: (613) 224-7283



Get involved, promote oral health and the dental hygiene profession!

For ideas and suggestions, contact your Provincial Campaign Coordinator.
Refer to the enclosed NDHC Order Form for the names and CDHA products available to help you get involved.

We are pleased to announce that arrangements have been made to ensure CDHA members receive Colgate's quarterly publication, Oral Care Report, with Probe. Colgate and CDHA recognize the importance of providing relevant and up-to-date scientific information to dental hygienists, and we are working together to ensure that such information is available in a timely manner that supports the profession. CDHA applauds Colgate for recognizing the value of working collaboratively to meet our members' needs.

CDHA and Colgate: Working Together For You

CDHA 32nd Annual Session – Highlights

163

The CDHA Board held its 32nd Annual Session in Halifax on June 22, just prior to the Association's Annual Conference. During the session numerous motions were passed, including ratification of two new position statements declaring the Association's stand with regard to complementary practice and health promotion activities. They stated:

COMPLEMENTARY PRACTICE POSITION STATEMENT (JUNE 1995)

The CDHA supports, encourages and affirms those dental hygienists who choose to practice their profession in any environment congruent with their experience, education and interest.

HEALTH PROMOTION POSITION STATEMENT (JUNE 1995)

The Canadian Dental Hygienists Association strongly supports the role of dental hygienists in health promotion. CDHA recognizes dental hygienists' responsibility to assist individuals and communities to influence behavioural, social, environmental, economic and political determinants of health.

The appointment of Alberta dental hygienist, Myrna Frizell, to the position of junior representative to the International Federation of Dental Hygienists (IFDH) was ratified. This is a six-year term during which the incumbent serves as the Association's Junior Representative for the initial three years, then becomes the Senior IFDH Representative for the latter three years of the term. Board members also ratified a motion to fully fund CDHA's IFDH Directors' travel and expenses to ensure their participation at tri-annual IFDH meetings.

Among the projects receiving funding approval for the 1995/96 fiscal year is the call for a written proposal identifying practice options for dental hygienists and the development of a 'research grant application' (in collaboration with another health care agency) that will inspire dental hygienists to create care programs for under-served clients.

The Board has also agreed to fund a Survey Methodology Workshop for CDHA Directors and to support increased development of coalitions between CDHA and

other health agencies and associations. As well, plans are underway to complete the Practice Standards revisions and Education Standards document.

Over the next year CDHA will be seeking expressions of interest from researchers to prepare several background papers on numerous topics, including continuing competence (a literature review and annotated bibliography), continuing education needs related to the provision of dental hygiene direct care and options for direct access/Dental Hygiene Initiated Care.

CDHA Elects Alberta Dental Hygienist as New Vice President

A unanimous vote has provided Judy Clarke of Edmonton, Alberta with an opportunity to serve as CDHA Vice President for the 1995/96 term. The Vice President role is an important Association role because it serves as the training ground for future CDHA presidents, a role Judy will assume in June 1997, after having served on CDHA's Executive for two years.

Judy was elected to the position by the Board during its Annual Meeting held in Halifax, June 22. Judy is a former member of the CDHA Board and chaired the Practice & Regulation Council since January 1995. She holds a Bachelor of Science (1985) and a Diploma in Dental Hygiene (1987), both earned from the University of Alberta.

Judy is a past president of the Alberta Dental Hygienists Association (93/94) and has worked in private practice in Edmonton since 1987 for Dr. W.J. Sharun. She is an avid downhill skier, and enjoys mixed slow-pitch and team sports. As an active member of her profession she has been a member of ADHA's Practice Review Board since 1990. She has also served as Chair and bulletin editor of the Northern Alberta Dental Hygienists Society, and coordinated ADHA's National Dental Hygiene Campaign in 1991.



Investing in Dental Hygiene's Future:

The CDHA Endowment Fund

During the recent CDHA Conference in Halifax, James Wegg, Executive Vice President of the Dentistry Canada Fund (DCF), was pleased to announce that the CDHA Endowment Fund now has a balance of just over \$43,000. The CDHA Endowment Fund is directed by CDHA and administered by DCF as a public charitable fund designed to further dental hygiene research and education opportunities. CDHA encourages you to support the forthcoming fundraising campaign. By doing this you are investing in your future and the future of the profession!



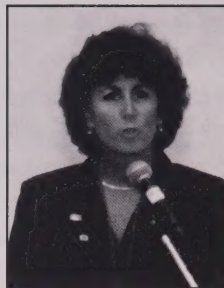
Bonnie Craig, Chair of CDHA's Professional Development Council, accepts a cheque from DCF Executive Vice President James Wegg. DCF awarded \$3,500 to offset costs related to the development of new National Dental Hygiene Education Standards.

Congratulating 1995 Dental Hygiene Graduates

CDHA representative Corinna Recker [left] presents Dalhousie dental hygiene graduate, Joceynl Burke [right], 1994/95 President of Dalhousie University's Second Year Dental Hygiene Class, with a CDHA 'Grad Pack', a gift presented to more than 600 dental hygiene students across Canada in 1995. Grad Packs are provided to new graduates by the Canadian Dental Hygienists Association in cooperation with corporate sponsor, Procter & Gamble. The packages include an environmentally friendly lunch bag, a CDHA portfolio, a congratulatory note, details on how to support the dental hygiene profession through CDHA membership, and oral care products from P&G.



ADHA President Says "CDHA is Power Personified"



American Dental Hygienists Association President Gail Bemis says members of the Canadian Dental Hygienists Association have a talent for taking on challenges with dignity and respect. In her address to conference delegates during the CDHA Awards Luncheon, held in conjunction with the Association's Annual Conference in Halifax, Gail compared Canada's

dental hygiene profession to the Bluenose, one of Nova Scotia's most famous schooners. She suggested that the story of the Bluenose — a tale of a crew with grit and tenacity, a strong sense of fair play and almost patriotic belief in the ability of the Bluenose to succeed — is remarkably similar to the history of the dental hygiene profession in Canada.

"Never have I met a more positively focused group of people, willing to give every effort your all, take on challenges with dignity and respect and maintain faith in your eventual success," she told conference participants. "This is what champions are made of, and I hope our two organizations will share and learn from each other, increase our collaborative efforts and begin developing joint projects to enhance the dental hygiene profession and its ability to serve the public."

She indicated that the meeting was a success in numerous ways, it provided participants with relevant continuing education, thought-provoking panels, generous sponsors, but most importantly, collegial interaction and the spirit of collectiveness, which, she says, is power personified.

The CDHA Executive's Visit to Newfoundland

In May 1995, CDHA Executive council member, Sue MacIntosh, visited St. John's Newfoundland to meet with the Newfoundland Dental Hygienist Association's (NDHA) Executive and general membership.



Members of the 1995/96 NDHA Executive [l-r]: President Elect, Cindy Holden; Secretary, Shell Gillis; Treasurer, Charla Daigneault, Past President Sandra Bennett and President Sherry Gabriel.

Dalhousie School of Dental Hygiene Appoints New Director

Glenda Butt, a native of Corner Brook, Newfoundland is the new Director of Dalhousie University's School of Dental Hygiene. Her appointment to the five-year term position was effective July 1, 1995.

Glenda is a Dalhousie dental hygiene graduate and earned a BA from St. Mary's University. She also holds a MEd in Curriculum and Administration from Queen's University. She has been a faculty member at Dal's School of Dental Hygiene since 1972 and is well known by her peers for her boundless enthusiasm and dedication to the dental hygiene profession. She is a respected teacher and clinician and is also engaged in research.

Over the years Glenda has been involved with various university committees as well as local and national dental hygiene organizations. She is a frequent continuing education presenter, and is involved in community dental projects. Most recently she served as Scientific Co-chair of CDHA's 6th Annual Professional Conference held in Halifax last June.



ADHA Honours Two Alberta Dental Hygienists

Marg Wilson, a dental hygiene instructor at the University of Alberta since 1980, was presented with the Marilyn Pawluk Mabey Award at the Alberta Dental Hygienists Association's Annual Conference held in Jasper, Alberta in May 1995. Marg graduated from the U of A's dental hygiene program in 1971 and has been a dedicated advocate of the profession ever since. She has worked in public health, general and periodontal practice, research and education, and earned a Bachelor of Education in 1981 from the U of A. She has a long history of volunteer work with all levels of the profession. She is a past president of the Northern Alberta Dental Hygienists Society, a past president of the Alberta Dental Hygienists Association and served as Chair of CDHA's Professional Development Council from 1991-1994.

The Marilyn Pawluk Mabey Award was established in 1978 by the ADHA to honour and perpetuate the memory of the late Marilyn Pawluk Mabey, an individual who was instrumental in creating the Alberta Dental Hygienists Association and who assumed an ongoing leadership role through the Association's formative years.

Sandy Cobban, a community health dental hygienist who recently became Supervisor Dental/Oral Health Services for the Aspen Regional Health Authority, was presented with the Joanne Clovis Award by the ADHA at its Annual Conference held in May. Sandy earned her diploma in dental hygiene in 1982 at George Brown College in Toronto, ON. She currently works on a multi-disciplinary injury prevention committee, teaches and coordinates community health field experiences for first year dental hygiene students at the U of A.

The Joanne Clovis Award was established by ADHA in 1987 to recognize significant contributions by a member to the oral health of the community.

We neglected to identify the individual who provided the cover photo for our July/August issue and the photos of Algonquin students used in the "Student Scene" section and on the "Table of Contents" page. Our sincere thanks to Maria Papadopoulos of Scarborough, ON (a 1995 Algonquin College dental hygiene graduate) for providing the photos!

Atlantic Provinces Discuss Self-Regulation in Halifax

Representatives from dental hygiene associations in provinces seeking self-regulation met in Halifax in June prior to CDHA's Annual Professional Conference to participate in a Self-Regulation Workshop. The participants included representatives from Saskatchewan, Manitoba, Newfoundland, Prince Edward Island, New Brunswick and Nova Scotia.

The workshop, which was organized and hosted by members of CDHA's Practice and Regulation Council was designed to help dental hygiene leaders in provinces that are considering self-regulation gain a better understanding of the process. Participants included Noel Selinger of Saskatchewan, Signe Jewett of Manitoba, Maria McKenna of Prince Edward Island, Angela Hynes of Newfoundland and Sharon Titus of New Brunswick in addition to the provincial presidents representing the dental hygiene associations of these provinces and members of CDHA's Practice and Regulation Council.

The program featured presentations by Burglind Gregg, Dip DH, LLB who discussed the legal aspects of self-regulation, including how to start the legislative process, financial considerations and key ideas and strategies. Marilyn MacKay-Lyons of the Nova Scotia College of Physiotherapists discussed the implications of self-regulation on health professions with relatively small memberships and minimal revenue dues. Patricia Grant, of Halifax, NS, who has developed a facilitator's workshop designed to raise awareness of self-regulation in the general membership of any association considering embarking on this path, shared the contents of her workshop and identified ways to bring members 'on board'.

The workshop concluded with a panel discussion highlighting the 'trials and tribulations' of seeking and attaining self-regulation and beyond featuring Mary Ann Hayes, Dip DH, Executive Director of the British Columbia Dental Hygienists Association, Lynda McKeown-Mickelson, Dip DH, HBA, president of the College of Dental Hygienists of Ontario, and Brenda Walker, Dip DH, Executive Director of the Alberta Dental Hygienists Association.

Health & Socio-economic Inequalities

by Roger Roberge, Jean-Marie Berthelot and Michael Wolfson

Adapted by authority of the Minister of Industry, 1995, Statistics Canada.

"Canadian Social Trends — Summer 1995." Catalogue 11-008E: 15-20.

Readers wishing further information on data provided through the cooperation of Statistics Canada may obtain copies of related publications by mail from: Publications Sales, Statistics Canada, Ottawa, Ontario, K1A 0T6, by calling 1-613-951-7277 or toll-free 1-800-267-6677. Readers may also facsimile their order by dialing 1-613-951-1584.

Among Canadians born at the end of the last century, one-quarter died before their tenth birthday, less than 40% reached age 65 and very few reached age 85. At that time, the average life expectancy of men was 42 years and of women was 45 years. Since then, however, improvements have occurred in many areas, including nutrition, sanitation, housing, health care, pre- and post-natal care, and disease prevention. This progress has largely reduced the impact of communicable diseases and thus, the chances of premature death. As a result, life expectancy has increased to 75 years for males born in 1991 and 81 for females born that year.

As people age, however, many will develop minor ailments, such as deteriorating vision and hearing. Furthermore, with advanced age, people often develop severe health problems resulting in, for example, mobility problems and chronic pain. As a result, although Canadians can now expect to live much longer than in the past, it is not clear to what extent these added years of life are spent in full health or not. To address this question, a Health Status Index (HSI) was created that combines various health characteristics reported by adults on the 1991 General Social Survey.

According to the HSI, most Canadians spend the vast majority of their lives with a high level of health, with periods of ill-health usually occurring at older ages. Age, however, is not the only factor related to health. Those with low household incomes, low educational attainment, low-skilled occupations or without paid work are, on average, in poorer health than other adults.

Most adults are very healthy

Most adult Canadians are either in perfect health or have ailments of a minor nature that can be fully corrected, such as near- or far-sightedness or a slight hearing loss. Using the HSI to measure overall health, 79% of men and 77% of women in 1991 had a high level of health (an HSI score of 80% or greater). About one-third of adults (34% of men and 27% of women) reported that they had perfect health (an HSI score of 100%).

Health problems are more common among older than younger people. The proportion of adults reporting themselves to be in perfect health in 1991 declined from 50% of men and 41% of women aged 15 to 34 to only 7% of men and 6% of women aged 55 and over. Almost two-thirds of older adults aged 55 to 74, however, did report having a high level of health (an HSI score of 80% or greater). Even among people aged 75 and over, more than 40% of men and women reported having a high level of health.

Many adults who had serious health problems, however, were residing in institutions, such as nursing homes and hospitals, and were not part of this analysis. This is because the 1991 General Social Survey included only adults living in private households. The proportion of seniors, especially those aged 75 and over, reporting a high level of health would probably have been lower if it had been possible to include those living in institutions.

Emotional problems, vision and hearing loss, and pain increase most with age

Health problems related to vision, hearing, speech, mobility, emotional state, thinking and memory, dexterity, and level of pain and discomfort tended to be more prevalent among older age groups. The extent to which the HSI declined with each subsequent age group, however, differed for each of these components of health. In addition, there were differences between men and women.

Men and women of all ages reported a lower level of emotional health than that of all other components of health. Men's score for emotional state declined more from younger to older age groups than did any other component of men's health. Women's score for emotional state also declined sharply with age. In addition, both men's and women's scores for vision and hearing loss, and pain and discomfort declined steadily from younger to older age groups. Mobility difficulties, on the other hand, varied little by age until age 75. Among those aged 75 and over, mobility difficulties were more severe for women than men. Men and women of all ages reported a high level of dexterity, and thinking and memory.

Few years of ill health expected for most adults¹

Although health problems tend to become more common as people age, periods of ill health may be experiences not only at the end of a life, but also in episodes during life or, for some, throughout life. In addition, the severity of episodes of ill health can vary throughout a lifetime.

In general, women can expect to live longer than men but can also expect to spend more time with health problems. Women at age 15 in 1991 could expect to live another 67 years and to spend the equivalent of 9 years with ill health. Men that age, on the other hand, could expect to live only 60 more years and to have the equivalent of 7 years with ill health. Similarly, women at age 65 in 1991 could expect to live another 20 years and to spend the equivalent of 4 years with ill health. Men that age could expect to live only another 16 years, 3 of which would be spent with ill health.

Adults with low socio-economic status are more likely to have health problems

When the HSI was used to examine the health of Canadians at different ages in relation to their socio-economic characteristics, the results were consistent: having a low level of educational attainment, being unemployed, being an unskilled worker or living in a household with a low income were all related to having lower health levels.

Although there is clearly a relationship between socio-economic status and health, it is not possible to determine from the a HSI whether having a higher socio-economic status makes or keeps people healthy, or whether being healthy allows people to attain higher status. A recent study suggests, however, that higher socio-economic status (as measured by employment earnings) has a positive influence on health.²

Differences in health levels by socio-economic status were particularly strong among adults aged 45 to 64. This is likely because by that age, adults have begun to experience the cumulative effects on their health of the lifestyles and life experiences they have had in the past. Among seniors, especially those aged 75 and over, there are still differences in health by socio-economic status. The results, however, are less clear because many of those who were less healthy at younger ages have died or have been institutionalized, leaving a relatively healthy population of seniors living in private households.

EDUCATIONAL ATTAINMENT:

Adults without a high level of educational attainment had lower health levels. Among men, differences in health status by education were particularly strong at ages 55 to 64. After age 65, differences persisted but were not as great. Among women, on the other hand, large differences in health levels emerged at age 45 and continued throughout the older age groups.

Given that the educational attainment of the population has been increasing over time, the concept of a higher education is relative to a person's age. For this analysis, adults under age 55 were considered as having a high level of education if they had at least a post-secondary diploma, while those aged 55 and over were considered as having a high level of education if they had completed high school.

EMPLOYMENT:

Men and women aged 25 to 65 who were looking for work, going to school, or keeping house had lower health levels than those with paid employment. Differences in health levels by type of main activity were particularly strong among men. This may be because men are more likely than women to be without paid work as a result of an involuntary situation, such as a job loss or a debilitating health problem.

Of those with paid work, unskilled workers had lower health levels than skilled workers or professionals. Among men aged 25 to 64 and women aged 35 to 64, unskilled workers had the lowest levels, while professionals had the highest.

HOUSEHOLD INCOME:

When adults were divided into three groups based on their household income, those living with the lowest household income had, on average, the lowest health levels.³ The relationship between low household income and lower health status was particularly strong for both men and women aged 45 to 64.

Among senior women, those with the lowest household incomes had, on average, lower health levels than those with either middle or high incomes. Among senior men, however, those with middle incomes had the highest average health levels.

Household income may not be as good an indicator of the socio-economic status of seniors as it is of younger adults. Many adults aged 65 and over have made a transition from work to retirement and hence have recently moved to a lower income level. Also, while many seniors have a low income, some have assets, such as a mortgage-free home.

Low incomes associated with greater health risks

Many factors influence a person's health, including biological make-up, environment and lifestyle. Recent health surveys have shown that adults living in households with low incomes are more likely than others to engage in activities, such as smoking, that may place their health at risk.

According to the 1990 Health Promotion Survey, adults living in households with low incomes were more likely than others to be daily smokers and to use tranquilizers or sleeping pills. They were also less likely to have known some of the causes of heart disease and some of the methods used to prevent the spread of sexually transmitted diseases. Among those who smoked, adults with low incomes were less likely than others to quit smoking in order to improve their health.

HSI as a monitor of changes in health of the population

Currently, the measurement of health is dominated by statistics related to administrative information, such as the number of doctors, deaths, and hospital days. These types of measures, while useful for certain applications, provide only a superficial accounting of changes in the health of the population. To fully evaluate the health of Canadians, people's health status needs to be measured and examined over time.

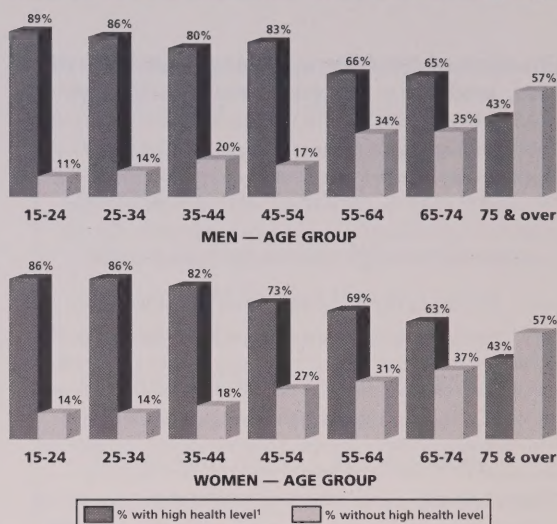
The Health Status Index (HSI) provides such a measure. If made available periodically, the HSI could be used to monitor changes in disparities in health status among different groups within the population, and to evaluate the effectiveness of health promotion programs and other health policies.

¹To evaluate the burden of ill health, life expectancy figures were adjusted with the HSI. This measure is known as Health-adjusted Life Expectancy.

²M. Wolfson, G. Rowe, J. F. Gentleman and M. Tomiak. "Career Earnings and Death: A Longitudinal Analysis of Older Canadian Men." *Journal of Gerontology: Social Sciences*, 1993: Vol. 48-4, S167-S179.

³Household income was adjusted for household size to reflect the increasing draw on household resources that additional household members present. Since income level varies with age, individuals within each age group were ranked from those with the highest household income to those with the lowest household income. Individuals were then divided into three groups (low, middle and high income).

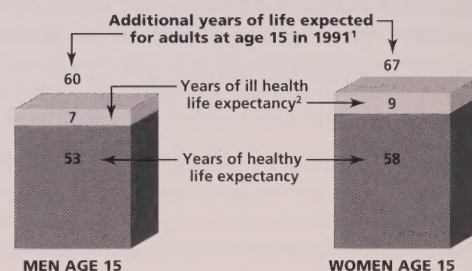
Health levels declines with advancing age



¹ HSI score of 80% or greater.

Source: Statistics Canada, Health Status Index (HSI) using the 1991 General Social Survey.

Women live longer but spend more time without full health

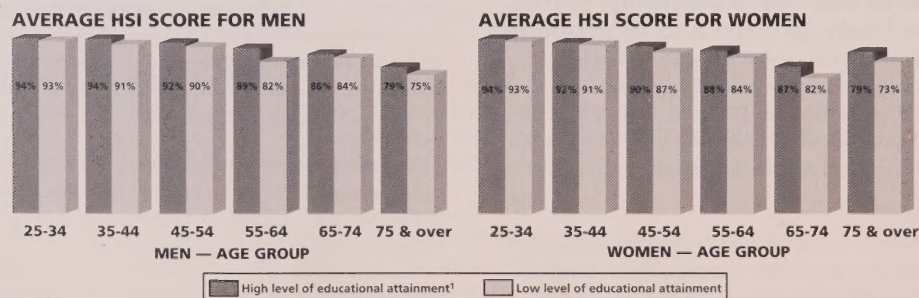


¹ Life expectancy figures were adjusted with HSI to produce an estimate of Health-adjusted Life Expectancy.

² The difference between total life expectancy and Health-adjusted Life Expectancy represents the duration of all episodes of ill health.

Source: Statistics Canada, Health Status Index (HSI) using the 1991 General Social Survey.

Adults with low educational attainment have lower health levels

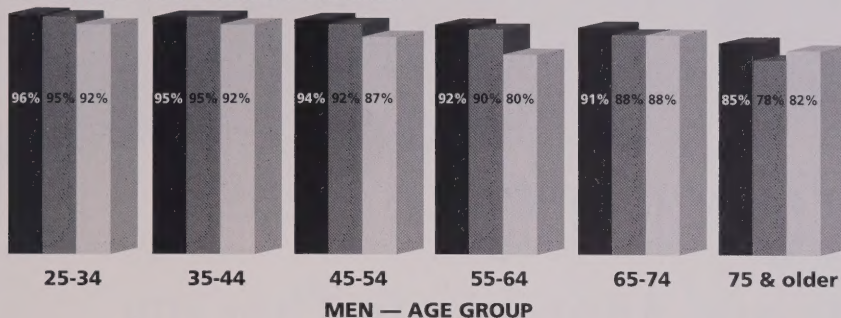


¹ Those under age 55 were considered as having a high level of education if they had at least a postsecondary diploma. Adults aged 55 and over had a high level of education if they had at least a high school diploma.

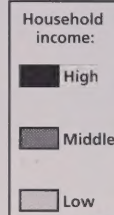
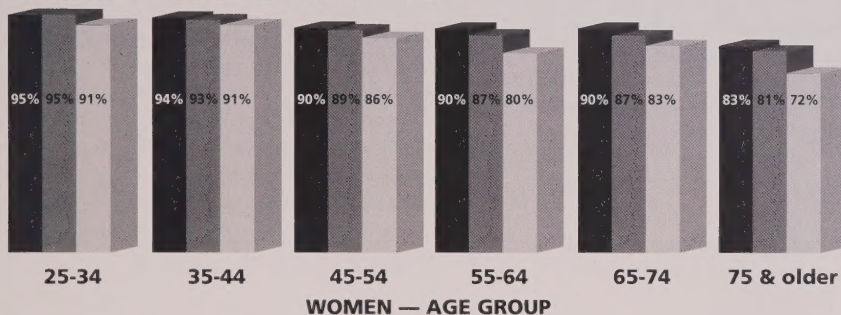
Source: Statistics Canada, Health Status Index (HSI) using the 1991 General Social Survey.

Adults with low household incomes have lower health levels

AVERAGE HSI SCORE FOR MEN



AVERAGE HSI SCORE FOR WOMEN



Source: Statistics Canada, Health Status Index (HSI) using the 1991 General Social Survey.

169

Canadian Social Trends Backgrounder

THE HEALTH STATUS INDEX

The Health Status Index (HSI) was developed at McMaster University¹ and, although still provisional, represents a new way to measure the health of the population. This index measures health status by combining two components: a description and a valuation of health. For this analysis, the descriptive component was developed using the 1991 General Social Survey, in which respondents were asked a series of questions related to their own health in several areas: vision, hearing, speech, mobility, emotional state, thinking and memory, dexterity, and level of pain or discomfort.

The valuation component was derived from responses to a survey conducted by McMaster university asking individuals to rank various health conditions in order of the severity of their effects on a person's health. The descriptive and valuation components of each health area were combined to produce an overall index score for each respondent.

This type of index can be used to rank all health states experienced in a population. Using the state of death as a reference point equaling 0%, the HSI can range in value from perfect health

(100%) to states rated worse than death (less than zero). In this analysis, an HSI score of 80% or greater was considered a high level of health.

For more information on this subject, contact the authors at the Health Analysis and Modelling Group, Social and Economic Studies Division, Statistics Canada, Ottawa, K1A 0T6 (E-mail: roberog@statcan.ca).

¹G. W. Torrance, Y. Zhang, D. Feeny and W. Furlong. "Multi-attribute Preference Functions for a Comprehensive Health Status Classification System." Hamilton: McMaster University Centre for Health Economics and Policy Analysis, 1992: Paper 92-18, 1-61.

Robert Roberge is an analyst and Jean-Marie Berthelot is a senior analyst with the Health Analysis and Modelling Group; Michael Wolfson is the Director General of Institutions and Social Statistics Branch, Statistics Canada.

BIBLIOGRAPHIES

Prepared by Carol Barr Overholt, Dip DH

ARTICLE:

A Review of Oral Fungal Infections and Appropriate Therapy

Author(s): Brian C. Muzycza, DMD, Michael Glick, DMD
Journal: *JADA*, Vol. 126, January 1995

This article reviews frequently seen oral fungal infections and current treatment therapies.

A surge in the number of clients presenting with these opportunistic infections is attributed to pharmacological advances and an increase in the number of immunosuppressed clients seeking treatment from general dental practitioners.

Oral candidiasis is the most frequently seen oral fungal infection and one of the most familiar oral mucosal pathologies caused by the *Candida* species. *Candida* is a common microorganism found in both the gastrointestinal and vaginal regions and seen in the oropharynx of as much as 60% of the healthy non-hospitalized population.

It is suspected that *Candida* sp. afflict the tissues through tissue invasion, causing hypersensitivity, or the production of *Candida* toxins. These infections may be either localized or symptoms of systemic conditions. The local conditions present clinically as:

PSEUDOMEMBRANOUS CANDIDIASIS (THRUSH):

This version presents as "smooth creamy white or yellow plaques" on any mucous membrane. Wiping, to remove the plaques, reveals a red mucosa underneath.

ERYTHEMATOSUS (ATROPHIC) CANDIDIASIS:

Erythematous candidiasis presents as "red patches" on the mucosa. It is frequently seen on the palate and dorsum of the tongue, leaving a smooth depapillated surface.

HYPERPLASTIC (CHRONIC CANDIDIASIS):

Although similar to the pseudomembranous version, it cannot be wiped off. Discoloration, due to food pigments or tobacco use, may be present.

ANGULAR CHEILITIS (PERLECHE):

This condition may appear singularly or in conjunction with other forms of candidiasis. It appears as red cracks, or fissures, at the corners of the mouth and may be covered in a pseudomembrane.

Oral candidiasis is often asymptomatic but may be accompanied by difficulty swallowing, or a painful burning feeling. It presents as a response to a decreased host resistance caused by broad-spectrum antibiotics, corticosteroid or tricyclic antidepressant therapy. Antibiotics suppress the normal microflora and allow an overgrowth of *Candida*. Corticosteroids, and other immunosuppressive medications, lower resistance to *Candida* by suppressing the T-lymphocyte inflammatory response. Anti-depressants can produce xerostomia encouraging fungal overgrowth.

Candidiasis is diagnosed through either a swabbing of the tissues, or a light scraping of the lesion site, followed by culturing. Clinical signs coupled with exfoliative cytology will confirm pathosis.

Systemic conditions that predispose clients to fungal overgrowth are: diabetes mellitus, hypothyroidism, hypoadrenalism, Sjogren's syndrome, head/neck radiation therapy, iron deficiency and diet. These conditions are often affiliated with lack of salivary flow which can lead to candidiasis. Decreased salivary flow is also associated with a decrease in the efficiency of the immunologic response. The availability of glucose in the oral cavity promotes the growth, and tissue adhesiveness of *Candida*, explaining the dietary factor.

Denture stomatitis presents as tissue that has become inflamed from ill-fitting dentures, or from an acrylic allergy, concurrent with candidal overgrowth. The authors stress that treatment for the oral infection should also include treatment of the denture appliance.

The article details other deep-seated, or systemic, fungal infections including aspergillosis, cryptococcosis and histoplasmosis, but indicates that these conditions rarely produce symptoms in the oral cavity. Diagnosis is confirmed through tissue biopsy.

Pharmacologic management of the superficial candidal infections includes the use of topical antifungals like clotrimazole and nystatin. These oral medications are available in many forms and often contain sugar. Those clients who cannot use sugar-bearing lozenges or rinses effectively, may use the sugarless vaginal tablets. Invasive systemic fungal infections may be treated with amphotericin B, nystatin or azole antibiotic antifungals including clotrimazole and miconazole.



CDHA's 6th Annual Professional Conference

CDHA's 6th Annual Professional Conference was a "whale" of a success. Over 450 dental hygienists embarked on a three day voyage into a sea of information. Ports of Call: The Public, The Practitioner, The Profession.

June 19 - 22

The Captain, Maxine Borowko and her crew (CDHA Board) met prior to the conference to conduct the business of the Association and set the course for 1995/96. The councils worked hard during the week to ensure that HMS CDHA is outfitted for the voyage ahead.

June 22

At the 32nd Annual Session the course was charted and set.

6. CDHA in Action: 32nd Annual Session, Halifax, Nova Scotia, June 22, 1995

7. Professional Development Council 1994/95 (Back row [l-r]): Joanne Clovis (Resource Person), Sheryl Feller (Resource Person), Stephanie Nagle, Eleanor McIntyre (Co-Chair), Corinna Recker (Co-Chair) (Front row [l-r]): Bonnie Craig, Charla Lautar, Marnie Forgay (Executive Liaison)

8. Presidents of Provincial Dental Hygiene Associations met Thursday, June 22 to share information and highlight their Association's activities over the past year at the President's Forum. [l-r] Vicki Thompson (BCDHA), Barb Long (SDHA), Cathy Howatt (NBDHA), Julie Muise (PEIDHA), Nancy Hughes (MDHA), Sherry Gabriel (NDHA), Sharon Compton (ADHA), and Christine Ryan (ODHA).



1. Health Promotion Council 1994/95 (Back row [l-r]): Maxine Borowko (Executive Liaison), Wanda Staples, Sharyn Milroy, Heather Tommy (Front row [l-r]): Dawn Mueller (NDHC Campaign Coordinator), Judy Parker (Chair), Patricia Noble

2. Member Services Council 1994/95 (Back row [l-r]): Aileen Seed (Chair), Diane Skene, Luisa Mohan (Front row [l-r]): Audrey Newcombe, Barbara Hewton, Sue MacIntosh (Executive Liaison)

3. Practice and Regulation Council 1994/95 [l-r]: Dianne Gallagher (Resource Person), Judy Clarke (Chair), Darlene Armstrong, Pamela Vokey, Kathleen Adams, Sue Raynak, Fran Richardson (Executive Liaison)

4. Dr. Burton Conrod brought greetings on behalf on the Canadian Dental Association.

5. Randy Williamson, President of the Canadian Dental Therapists' Association brought greetings to the CDHA Board.

CDHA's 6th Annual Professional Conference

While on board, dental hygienists were challenged by the conference agenda. Speakers from a variety of dental hygiene environments shared their knowledge and expertise. Information was available via lectures, panel discussions, table clinics, free papers and commercial exhibits. Participants learned about dermatological issues, pharmacology, lasers, diagnostic decision-making, local drug delivery, ultrasonics, self-regulation, stress management techniques and more.



1. NSDHA volunteers checking the passenger list and welcoming participants.

2/3. "Standing Room Only" at the self-regulation panel discussion. ADHA Executive Director Brenda Walker shares the Alberta experiences.

4/5. CDHA's Practice and Regulation Council hosted a pre-conference workshop for representatives of provinces seeking self-regulation status.

6. Sharon Amer of Health Canada shares information on the Dental Community's Response to Family Violence.



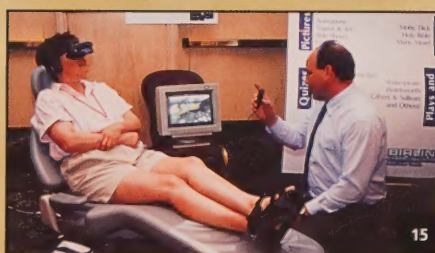
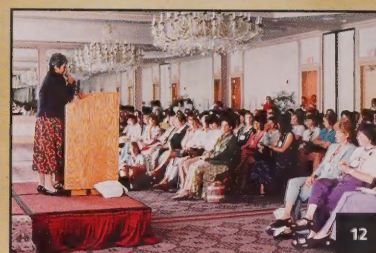
All conference photos by Trina Biddington of Halifax. Special thanks to Kodak Canada for providing film and processing.

Several dental hygienists presented free papers on original research they had conducted:

7. Mickey Wener
8. Scott Rhude and Cyndy Grant
9. Rita Chu and Barbara Drewry
10. Dr. Jane Fulton, Keynote Speaker, welcomed by CDHA President Maxine Borowko.
11. Dalhousie Dental Hygiene students Julie Dort and Cheryl Jacquard are "hands on" at their table clinic
12. Dr. Barbara Harsanyi discusses the profession's responsibility with regard to oral malignancies.
13. Representatives from 21 dental industry companies participated in the commercial table displays providing insights on the latest products and technology.
14. Dr. JoAnn Gurenlian, who has published numerous articles in American Dental Hygiene Association publications, lectured on lasers and dental hygiene diagnostic decision-making.
15. Virtual Reality in the Dental Office: Am I really in the dental chair?



173



No CDHA Conference is complete without an evening of FUN. This year's local organizing committee organized a Ceilidh at Pier 22. Piper John MacLean welcomed delegates as they entered the facility, and inside entertainment was provided by the Scotia Highland Dancers, the Chebucto Fiddlers Fun, singer Paula Danyluc accompanied by Kevin MacDonald and a special appearance of the '7mm Pockets' singing Barrett's Privateers, a tribute to the late Andrea Brennan.



174

The dust has settled. I've had a mini vacation and time to reflect upon CDHA's 6th Annual Professional Conference. Like everything else I do, I wanted the conference to run smoothly and to be perfect — perhaps an unrealistic expectation on my part. The overwhelming response to this conference provided me with several valuable insights — like those you usually get with 20/20 hindsight. But because subsequent conferences will be able to build upon our experience, I guess even the "glitches" were worthwhile. Comments about the success of the conference reached me from many different sources. I agree that it was a success, but I refuse to take all the credit. I had a hard-working committee, many student volunteers, and the constant support of Janice Elger, our "person-behind-the-scenes". Together we organized the conference, and did our best to meet the needs of the registrants.

Moreover, the conference would not have been the success it was without the delegates. I thank all those who registered, in full or in part for contributing to the "best ever" conference. You filled the rooms for the sessions, including those held on the final day, and took advantage of visiting our exhibitors. Your enthusiasm and excitement added greatly to the charged atmosphere of the conference. I'm sure there was no doubt about when the sessions were breaking, given the noise level in the foyer! To me, that noise represented everything a conference should be: discussing the information gained from the sessions, networking with other hygienists with similar interests, and catching up with friends and colleagues. That's what makes a conference a success.

THANK YOU to the room monitors, the committee chairs and their staff, the student volunteers, the tartan tam makers, all the CDHA staff at Central Office, particularly Sue Turcotte who processed all the delegate registrations, and last but not least thank YOU — to all the delegates.

See you in Calgary!

Sincerely,
Terry Mitchell
Chair, Local Organizing Committee
CDHA 6th Annual Professional Conference

1. Joyce Geldreich, Chair of the 1996 Local Organizing Committee was in Halifax to tell conference participants what to expect next year in Calgary! See you there!

2/3. On Friday evening, conference participants were invited to the President's Reception where they had a great opportunity to meet the President and CDHA Board members and network with friends and colleagues.



Calgary and the Canadian Rock



Meeting the Needs of Under-serviced Communities:

ONE UNIVERSITY'S EXTERNSHIP EXPERIMENT

175

Increasingly, the ability to respond to society's needs is becoming a guiding principle for educational institutions. This concept will, in difficult financial times, take on even greater significance when all programs will have to justify their survival by preparing graduates that can work in areas where there is a demonstrable need. The implications of this approach are far-reaching and require years of planning to adjust the current focus of a program to meet the new goals. In this article, a dental program that set out to broaden the scope of its curriculum in order to respond to societal needs will be reviewed.

Approximately 80% of the Canadian population lives within 70 miles of the US. border. Similarly, most of the universities and community colleges are in this area and most are to be found in large urban settings. The students attending the institutions are drawn predominantly from these same regions and on graduation, wish to settle in communities they know and whose needs they have been trained to serve. In Manitoba, the resulting disparity in the numbers of professionals providing health services in the southern urban versus the rural and northern communities became a political issue in the '70s. In 1972, the government of Manitoba appealed to health-related faculties to devise programs for their students that would encourage them, on graduation, to consider locating in the under-serviced rural or northern areas. As all provincial educational institutions are publicly funded, it was relatively easy to organize dialogues with the faculties to address these issues. The Faculty of Dentistry, at this time, was in the process of reviewing its traditional in-house clinical training program. The Curriculum Committee chose to incorporate this request for greater emphasis on the needs of the under-serviced communities into the planning matrix for a new curriculum. Ultimately, hours were allocated to accommodate a revised Community Dentistry Program and a new Practice Management Course. Time was set aside for all students, in their final year, to spend four weeks in a clinical externship. To achieve these goals, a full-time coordinator was hired in 1975 and the first externship started in September 1976.

Initially two sites were selected for the externship program: Peguis Indian Reserve, a rural community 135 miles north of the University; and Churchill, an Arctic Ocean seaport 600 air miles from Winnipeg. Both locations provided clinics with three operatories, access to an

operating room, and adequate accommodation for two students and a supervising dentist. All students were assisted by trained local assistants available for clinical duties and interpretation where required.

The supervising dentists, on being hired, were required to spend four weeks in faculty programs to familiarize themselves with teaching and grading methods. New staff were also introduced to faculty-based specialists with whom they were encouraged to consult by telephone, as required. They were also given a one-week crash course in emergency orofacial trauma management to prepare them for any involvement with accident victims, should they be called upon in the remote communities. Students attended an orientation prior to departure and were given a written description of the externship protocol. On return, they were to present a written review of their experience.

The clinical component is a general practice format providing full service to the community. Due to the high rates of bottle caries in the aboriginal community, pedodontic services under general anaesthesia are also included. Students are expected to conduct epidemiological studies and dental health education programs as required. The latter has been of considerable value in explaining dental health to populations unaccustomed to utilizing dental services.

Over its 18-year continuity, new locations have been added to the program. The far northern communities servicing the Inuit of the Northwest Territories, are the most sought after placements, due to the unique environment. Funding for the program is provided by grants from the Province of Manitoba and the Federal Government of Canada.

To assess the possible impact of the externship program on the distribution of dentists in the study area, the Provincial Dental Registries for the year prior to initiation of the program (1975) and that of the eighteenth year of the program (1993) were analyzed. The findings would identify the number of dentists whose primary practice location was in the study area.

In order to document any changes in service patterns to communities, the provincial Dental Association's records were reviewed for private practice locations, and those of the Canadian Government to aboriginal people living on Reserve lands. A similar process was employed to catalogue programs in the Keewatin region of the Northwest Territories.

The data identified primary and satellite practice locations that were cartologically plotted.

In the 18 years since the externship program was instituted, there has been a 65% increase in the total number of generalists registered to practice in the province of Manitoba. The designated under-served areas had a 31.5% increase in the number of dentists whose primary practice location was within that area.

Table I
Number of Practising Dentists in Study Area
(Excluding Specialists and Academics)

	1975	1993	% Increase
Total Manitoba	284	465	63%
Rural & Northern Manitoba	73	96	31.5%

Table II
Number of Dentists with Primary Practices in
Aboriginal Communities

Communities:	1975	1993	% Increase
Reserve Communities	6	26	333%
Keewatin Region, NWT	1	4	300%

Table III
Number of Communities Receiving Regular Dental Service
in Study Area (Excluding two southern cities)

	1975	1993	% Increase
Rural & Northern Manitoba	23	61	165%
Aboriginal Communities:			
Reserve Communities	12	42	250%
Keewatin Settlements, NWT	1	7	600%
TOTALS	36	110	205%

Figures for native communities show that initially six dentists chose to practice primarily on the Indian Reservation areas, one was located in the Keewatin District. By 1993 the numbers had risen to 26 and four respectively, an overall total increase of 428%.

Many of the communities in the study area are too small to support a full-time dental practice, therefore the figures in Table III were derived to measure the increase in the number of communities receiving dental services regularly either in a full-time or satellite part-time clinic. These figures show a 205% increase in practice locations. From 23 out-of-city sites to 61 in 1993 for general practice, an increase of 165%. The Manitoba aboriginal program went from 12 to 42 locations, an increase of 250%. The Keewatin sites for regular dental services increased from one in 1985 to seven in 1993, an increase of 600%.

This program has impacted dental service delivery in both private and public problem zones, however, the fact that graduates have chosen to work in such high numbers in very remote locations is an intriguing finding. Given that government funding for these programs has been high, it still must be recognized that the demands of flying in small planes, being away from home for extended periods, working in isolation from colleagues would have presented some negatives that could have had a deterrent effect on recruitment. This has not been the case, which suggests that if the training program does the job of showing the options in a positive way, some graduates will be attracted to previously under-served areas.

Prior to the introduction of the Manitoba Externship Program, the need for preventive care in the northern communities had been recognized by the administration at the School of Dental Hygiene and an externship site had been instituted at the Arctic port of Churchill. Unfortunately, an emphasis for treatment services contributed to the demise of this program within a few years. Few positions for dental hygienists have since been funded by the Federal Government.

Since this program's inception, the dental hygiene profession's ability to reduce dental disease has improved greatly. The decline of caries in school-age children in particu-

lar, has had, and will continue to have, an impact on how dentistry is practiced in Canada. This phenomenon is not, however, true for all regions of Canada, particularly for First Nation communities. The dental health status in these communities is not uniform. And although school populations that have a Dental Therapy Program have minimal caries rates, the problems of pre-school and adult populations are frequently severe.

Throughout Canada at this time, the move towards aboriginal self-government is underway. As part of this process, individual communities will choose their own health programs and hire the people to deliver what, one can only hope, will be the most beneficial programs. *In the area of oral care, an emphasis on preventive programs and community education would be a logical priority. Should this emerge as the direction of choice, the demand for appropriately trained dental hygienists could be significant.* This scenario would present many challenges to dental hygiene educators, who they enroll, and what and where the students would be taught.

If the preventive needs of the Aboriginal communities are to be undertaken by dental hygienists, dental hygiene educators may face greater challenges than the University of Manitoba's Faculty of Dentistry did while focusing on treatment services. The primary needs to be targeted for a new program, would be in the area of behavioural or lifestyle change, a complete and time dependent endeavour. In the case of behavioural change, the full impact of cultural values, language and beliefs would have to be considered for each community to be included in the program, and the Native community in Canada is as diverse in its dental health status as it is in language and culture.

The unifying aim of solving problems for their communities in their own culturally-specific way does not exclude a role for the mainstream Canadian system. However, what is required is an opportunity to access and then modify part of that system to make it possible for aboriginal students to enter and feel comfortable in these programs. Similarly, there is a need for traditional Canadian students to become more familiar with Native issues. The entry of aboriginal students into the dental professions has been gradual with the exception

of the Dental Therapy Program. This program, from its inception, was designed to accommodate the social and cultural issues that would impact on the graduation of northerners and in so doing has been successful. Should dental hygiene programs consider involvement with programming and/or servicing in northern Canada, they

would be well-advised to consult with the organizers of other health programs designed specifically to meet the needs of these under-served populations, be they programs administered from southern universities or northern-based schools.

Dr. Odum heads the Community Dentistry Program at the University of Manitoba. Her teaching program is designed to help students become aware of the social context of dental care. She has conducted research projects, educational courses and numerous clinics in First Nations communities. Dr. Odum is currently working as a consultant for a Manitoba Reserve's pre-transfer planning program.



177

PLAN YOUR 1996 VACATION NOW...

Connect in Calgary

A dynamic cosmopolitan city that's clean, safe and friendly. Outdoor adventure in an unspoiled mountain playground: hiking and horseback riding in the back country of Banff National Park, the thrill of whitewater rafting, golfing in a lush green valley surrounded by the jagged peaks of the Canadian Rockies, relaxing by a crackling fire at world class accommodations... and a chance to attend CDHA's 7th annual Professional Conference!

Go for it — make plans NOW to join us in Calgary, for an exciting vacation and learning adventure!

Reviewed by Nancy Vincent, Dip DH

Wilkins 7th Edition —

A COMPANION FOR EVERY DENTAL HYGIENIST

Clinical Practice of the Dental Hygienist, 7th Ed.

Author: Esther M. Wilkins, BS, RDH, DMD

Publisher: Williams and Wilkins

200 Chester Field Parkway, Malvern, Pennsylvania 19355, USA

Copyright 1994

Illustrations, indexed, 893 pages

178

When I first picked up the seventh edition of *Clinical Practice of the Dental Hygienist* by Esther Wilkins, I found myself consumed by the illustrations, charts and key word tables in each chapter. Unfortunately, I wasn't writing anything down on paper for this article. My observations and notes were more for the private practice in which I work. I was writing down new ideas to take into the office; a new hygiene treatment sheet for our files, updating our medical history form, reviewing our office emergency protocol etc. As a result, I realized that this text has such serviceable information including strategies for updating techniques, understanding clients with special needs, etc. that I feel it is an injustice to think that this text would be used primarily for academic purposes.

The text opens with a definition of the professional dental hygienist and outlines the legal, ethical and personal factors influencing clinical practices.

The next couple of chapters explain infection control, understanding transmissible disease, personal and client safety, disposal of contaminated waste and use of the ultrasonic cleaner prior to sterilizing instruments. Mention could also have been made about the breakdown of (latex) glove integrity when in contact with certain oils and petroleum jelly. There are water-soluble products on the market that would be more appropriate to use for protecting the lips.

Chapter 4 discusses the various methods of sterilizing instruments, the use of disinfectants, and universal procedures for the prevention of disease transmission.

Chapter 6 presents medical histories. "The significance of the history can not be overestimated... the state of the patient's health is constantly changing." The significance of vital signs and how they can influence dental hygiene appointments and intraoral and extraoral examinations and their role on how the oral cavity reflects the clients' general health are covered in Chapters 7 and 8.

Radiographs and study models are investigated in Chapters 9 and 10. Keeping infection control a priority, a suggestion would be to place all films in a disposable sandwich bag or "baggie" prior to placing the film in the client's mouth. After the film has been exposed, discharge the film from the bag then transport the film to be processed. This prevents saliva contaminants from leaving the

operatory. The importance of distinguishing between healthy and unhealthy periodontal tissues is covered in Chapters 11-13. The table on pages 188-189 is a clinical reference chart which facilitates the evaluation of the gingival tissues. Chapter 13 covers the clinical detection of periodontal pockets including the use of radiographs to aid and supplement the clinical examination.

Caries, occlusion and eruption of the teeth provide an ample review for the dental hygiene student. Once again, an excellent table helps to facilitate the examination of the teeth.

The different types of bacterial microorganisms, the formation of plaque, calculus and types of stain are discussed thoroughly in Chapters 16-18. The author has added Periodontal Screening and Recording (PSR) in Chapter 19 to aid in the initial assessment of periodontally involved teeth. Based on the PSR findings, a more comprehensive periodontal examination may be required as well as treatment.

Records and charting, Chapter 20, complements the preceding Chapters by assembling the information and documenting it for the client's file, or for use on a computer. This information is used in treatment planning, counseling, evaluation, legalities and identification of the client.

Chapter 21, "Dental Hygiene Treatment Plan", may very well be one of the most significant chapters. "The dental hygienist's objective is to prepare a flexible, realistic dental hygiene plan and sequence of procedures, based on the plan for total care of the patient." Treatment programs for different clients are illustrated on a flow chart, although the chapter clearly asserts that each client must be handled individually.

Chapters 22-25 are devoted to brushing and flossing techniques and adjunctive oral hygiene aids as well as their indications for use. The author has included many of the more recent oral hygiene aids and rinses that have become more "standard" over the past years. Understanding the need for supplemental instruction for a client with appliances and prostheses is addressed in Chapter 24.

When describing the three general categories of dental implants: endosseous, subperiosteal and transosteal (Chapter 25) the author states that endosseous are the most popular. It would have been beneficial to also mention the success rate of the various implant categories to give the reader a better understanding as to why this is the case. Not only is there a high failure/rejection rate of the blade and transosteal implants, but the surgery involved to remove the failed implants is very extensive. Perhaps, a section under the sub-head "History of Implants" can be included in future editions. Radiographs are contraindicated for several weeks following the

initial stage of surgery. I would appreciate more discussion about the various oral hygiene aids, including techniques for the hygienist to consider when instructing the implant client. Also, some discussion on the factors that can help to identify an ideal implant candidate may be warranted, since the dental hygienist is often the first person to see the client and discuss treatment options.

Disclosing agents and educating both the adult and child client is covered in Chapters 26 and 27. The author mentions the use of a phase contract microscope as a tool for educating the client about bacterial plaque. Setting up dietary counseling sessions and the principles for making dietary changes are covered in Chapter 28.

An in-depth discussion of fluorides is covered in Chapter 29. A notable change since my graduation from dental hygiene is that research now indicates a rubber cup polish is not required prior to the application of topical fluoride. Sealants bring to a conclusion Unit IV. Research indicates a) incipient pit and fissure caries are arrested by placing a sealant; b) cleaning pastes containing oils and fluoride do not necessarily need to be avoided.

The importance of effective and efficient instrumentation and the need to conduct exercises to develop strength and dexterity are neatly combined in Chapter 31. Six to seven per cent of dental hygienists are being diagnosed with carpal tunnel syndrome, this chapter gives the reader a better understanding of how detrimental habits can be prevented and corrected.

The author introduces the concept of sharpening instruments (Chapter 32), prior to the introduction of scaling and root planing treatment in Chapter 33. The treatment modality has changed over the years. At one point hygiene students were instructed to do a "gross scaling" during the first appointment, then have the client return for as many appointments as required to complete the fine scaling and root planing. Several negative aspects of this technique are discussed in this chapter. The author covers many aspects of scaling and root planing including instrument selection, procedures for supra- and subgingival instrumentation and ultrasonic and sonic scaling. The use of topical anaesthetic for many dental hygiene and dental services is also mentioned. Chapter 34 focuses on post care for scaling and root planing, gingival curettage and delivery of antimicrobial agents through professional subgingival irrigation.

Necrotizing ulcerative gingivitis or periodontitis and gingival and periodontal abscesses along with treatment modalities and client instruction are covered in Chapter 35.

Desensitizing hypersensitive teeth is the focus of Chapter 37. When clients apply a dentifrice with a desensitizing agent rubbing or burnishing the paste to the affected area will help to occlude the tubules.

Selective stain removal procedures are outlined in Chapter 38. Rubber cup polish, airbrasive and finishing strips are methods covered in this chapter.

All aspects of the placement and finishing of amalgam restorations are dealt with in Chapter 40. Marginal irregularities and mercury safety procedures are also discussed. The dental hygienist should appreciate tooth anatomy in order to maintain the completed amalgams' carving when polishing the amalgam.

Upon removal of orthodontic brackets, varying amounts of resin remain. Chapter 41 deals primarily with debonding techniques.

Section V closes with recommendations for preventive maintenance according to each individual's needs. Clients are to be educated that treatment does not mean an end to disease, oral diseases can recur.

Unit VI is devoted to clients with special needs. In each chapter that follows the author consistently provides a detailed explanation of the disability, disease or special needs; the treatment phase; dental hygiene care; and factors to teach the client. In highlighting a few chapters, Unit 6 opens with the pregnant client and the infant toddler. "Anticipatory guidance is the term that has been applied to teaching ahead of time so that untoward, unfavourable conditions can be prevented." A table is also used to illustrate this. The basics for understanding the adolescent client are well-covered in Chapter 45. The real challenge lies with the dental hygienists' approach and how to meet the adolescent on their level. The remainder of the chapter covers menstruation, hormonal contraceptives and menopause.

Dental hygienists are undoubtedly challenged to provide for the aging population as people are living longer, healthier lives. All aspects of gerontology are covered in Chapter 46 followed by the edentulous client.

Chapter 59 explains major factors to be considered when understanding the client with blood disorders. Some of these include: lowered resistance to infections, soft tissue changes and bleeding tendencies. The text closes with Chapter 61, "Emergency care". It explains to the reader the organization and readiness required to give life-saving measures in an emergency. All members of the dental team must be current CPR certificate holders and know where to readily access updated emergency equipment.

This text provides the student or professional with the most current information on the clinical practice of the dental hygienist. It is a comprehensive resource, not only for the aspiring dental hygienist, but also for a progressive dental practice, educators and health facilities. It is a user-friendly text because it is well organized; has excellent graphs, tables, illustrations and important headings are highlighted and/or printed in bold. The references and suggested readings at the conclusion of each chapter appear to be well-researched and enhance the credibility of the author.

179



Nancy Vincent received her dental hygiene diploma from Canadore College and recently graduated from George Brown College with an Expanded Duties (Restorative) Hygiene Diploma. Nancy is currently working with Dr. Rod Johnston and Dr. Paul Ciavolella at their "log cabin" practice in Corbeil, Ontario. Nancy has practiced dental hygiene for 17 years and taught in the Dental Hygiene Program at Canadore College. She is presently an examiner for the College of Dental Hygienists of Ontario (CDHO). She was instrumental in the development of the Nipissing District ODHA component society and represented the district for many years.

Reviewed by Joanne Clovis, Dip.D.H., B.Ed., M.Sc.

Book Review

CANADA'S HEALTH SYSTEM: BORDERING ON THE POSSIBLE

Canada's Health System: Bordering on the Possible

Author: Jane Fulton, PhD

Publisher: Faulkner & Gray Healthcare Information Center

1135 Fifteenth Street, NW, Washington, D.C.;

Copyright 1993

ISBN 1-881393-08-9, indexed, 302 pages

The purpose of this text is clearly described in the prologue: "This is by no means the definitive text on Canada's health care system, but an effort to present useful information that will add to the informed debate about health care reform in America". The author is an internationally recognized health policy analyst who has advised the Clinton administration in its enormous undertaking to reform health care in the United States. Fulton's analysis of Canada's health care structure and funding is intended as an offering to America of our knowledge and experience. The book was published at the height of the debate about health reform and government intervention in the health care system in the United States.

The health care choices that Canada has made have produced a system that resembles America in its hospital sector but is more like Europe in its community and social support. This text is a succinct and well organized overview, a primer for educators and students of health policy, and a basic reference text for others. Indeed, the dramatic changes occurring and proposed for health care in Canada involve everyone. An understanding of the basics of our system is a requisite for each of us if we are to make informed and thoughtful decisions to reshape our system. Fulton's book is a useful beginning or adjunct to other sources.

This soft cover book has 13 chapters, a glossary, and an index. The book begins with the structure and organization of health care in Canada; progresses through medical care in acute and long-term care institutions, community health services, issues including cost, ethics, and evaluation; and ends with a review of what Canada and the United States can learn from each other. Chapter 10 includes a brief overview of "Dental Services". Sections and subsections are distinguished by bold print, underline and overline, and point-form. Fulton's frequent use of numbered or serial point-form eases the reading and retention of the substantial content. Each chapter ends with a short list of the key sources consulted.

Chapter 1 outlines "The Structure of Canada's Health Care System" by recounting significant historical events and by summarizing nine features, trends and issues which set the stage for the remainder of the book. The range of players in health care is wide and decision-making power is widely dispersed. Fulton provides examples of power struggles, noting that outcomes are largely unpredictable. Chapter 3 outlines the philosophical underpinnings of our system. Again Fulton notes the political nature of health care, emphasizing that health care is under provincial jurisdiction and is a political act as governments are influenced by their electorates.

The comprehensibility of Chapter 2 on "Costs and Financing" is enhanced by the addition of nine tables and four figures. The fact that costs are rising faster than dollars are generated has led to the growing and complex debate over health care choices. A particularly interesting item is that, in this publicly funded system, about 25 per cent of health care costs are actually paid by private sources including direct payments by consumers and private insurance companies.

Chapter 4 outlines the role of physicians, emphasizing their traditional dominance in health care and calling for reform in the management of physician resources in Canada. The linkage of physicians, medicine, treatment, and acute care is made in Chapter 5, where Fulton describes hospitals as the cathedrals of modern society. Chapter 6 describes the broad range of community health services that are provided in a variety of non-hospital locations, but Fulton warns that most of these services are funded by the provinces and are suffering from severe cutbacks along with other social programs which are crucial to the health of Canadians. The appropriate and rational uses of technology, pharmaceuticals and research is the topic of Chapter 7. Chapters 8 and 9 are directed to the subjects of mental health and long term care.

The inclusion in Chapter 10 of "Dental Services" in "Emerging Health Professions, Dental Services and Emergency Services" is, at first glance, a peculiar combination of topics. It may be that each topic on its own was insufficient for a separate chapter. The topic of emergency services is certainly presented, even within this chapter, as separate and distinct from the other two. The linkage, however, of "emerging health professions" with "dental services" is deliberate. Beyond a very brief introduction to the dental health of Canadians and dental care costs and payment, Fulton's focus is the Saskatchewan

Dental Program and the dental therapists who were the unique providers of school-based care in that program. She describes the program as "one of the truly excellent cases of how new health programs should be introduced" (page 201). After noting the well-documented benefits and the political demise of that program, she concludes that "political debts and orientations, plus the wish to reduce public expenditures even when private costs for the same or fewer benefits would be higher, have eliminated an administrative and service model that should have swept the country" (page 201).

Chapter 11 discusses some of the more traditional indicators of health such as life expectancy and infant mortality, and also develops an introduction to the other "indicators of mental, physical, psychosocial, spiritual, and economic health" (page 213). Fulton summarizes with the sobering comment that the major determinants of health continue to be outside of the purview of the health system. Chapter 12 then follows with some of the broader issues regarding ethics, cost control, and evaluation of health status and the impact of specific health care activities.

In the final chapter, comparative data are given for countries of the OECD, drawing attention to the significant differences between Canada and the United States in such parameters as administration costs, hospital use, health care expenditures, and public opinion. The problems in the Canadian system are those found in all publicly-funded systems in the industrialized world but "Canada's health care system and its positive impact on health and security may show America that it is bordering on the possible" (page 266).

This text has ably assisted in informing the health care debate in America and, in serving this purpose, it has also provided the broadest possible view of Canada's health care system. In all but its size, the book is a welcome addition to the reference shelf on health care. The size is a standard letter size which, in soft cover form, is too large and pliable to be handled comfortably.

Joanne Clovis is an Associate Professor at Dalhousie University's School of Dental Hygiene.



1. Numerous CDHA conference participants in Halifax were anxious to have an opportunity to talk with Dr. Fulton about the opportunities the future holds for Canada's dental hygiene profession.
2. Dr. Jane Fulton, who became Alberta's Deputy Minister of Health in July, with outgoing CDHA president Maxine Borowko.

LISTERINE

ANTISEPTIC-ANTIPLAQUE
ANTINGIVITIS - MOUTHWASH

INDICATIONS: Helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care. Kills the germs that cause bad breath, plaque, gingivitis and sore throats due to colds.

CAUTIONS: Keep out of reach of children. Do not swallow. Not to be used by children under 12 years of age. In case of accidental ingestion, contact a Poison Control Centre or doctor immediately.

DOSAGE: Rinse full strength with 20 mL for 30 seconds twice a day.

MEDICINAL INGREDIENTS: Eucalyptol 0.091% w/v, Thymol 0.063% w/v, Menthol 0.042% w/v.

NON-MEDICINAL INGREDIENT: Alcohol.

NOTE: Cold temperatures may cloud this product, its efficacy will not be affected.

SUPPLIED:

Original Listerine: Clear, amber liquid available in bottles of 250, 500, 750, and 1,000 mL.

Cool Mint Listerine: Clear, blue, cool mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.

Fresh Burst Listerine: Clear, green, mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.

LISTERINE FIGHTS GINGIVITIS
WITHOUT STAINING

WARNER
WELLCOME

©1991 Warner-Lambert Company Inc. 100 Scarborough, Ontario M1L 2B3



PerioREPORTS

Bimonthly publication which summarizes periodontal research of specific interest to clinicians. Easy to read format keeps you up to date on the latest research findings. Journals reviewed for Perio REPORTS include:

Journal of Periodontology
Journal of Clinical Periodontology
Journal of Periodontal Research
Journal of Dental Research
Periodontal Abstracts
Quintessence International
J of Periodontics and Restorative Dent
JADA, JADHA
and many more

☐ Please send sample issue for my review

☐ \$48 one-year
☐ \$84 two-year

Name

Address

City

Prov Postal Code

Mail to: Perio REPORTS
Box 52090, 311 - 16th Ave. NE
Calgary, Alberta, T2E 8K9

CONTINUING EDUCATION

SEPTEMBER

OCTOBER

29&30 **THE CHANGING FACE OF TEMPOROMANDIBULAR DISORDERS**
University of Alberta, Faculty of Dentistry
Edmonton, AB(403) 492-5023

30 **EVERYTHING YOU WANTED TO KNOW ABOUT STREET DRUGS BUT WERE AFRAID TO ASK**
Dr. Hal Crossley
Dalhousie University, Faculty of Dentistry
Halifax, NS(902) 494-1674

13 **NEW PROCEDURES FOR IMPROVED SOFT TISSUE MANAGEMENT**
University of Toronto
Toronto, ON1-800-463-2999
Satellite sites: Victoria, BC, Vancouver, BC, Calgary, AB, Montreal, PQ, Halifax, NS

14 **ADVANCED PERIODONTAL INSTRUMENTATION**
Anna Matsuishi Pattison, RDH, MS
Dalhousie University, Faculty of Dentistry
Halifax, NS(902) 494-1674

14 **WITH WINGS THERE ARE NO BARRIERS**
ODHA
Markham, ON1-800-315-6342

14 **THE APPLICATION OF RECENT ADVANCES IN ORAL BIOLOGY TO CLINICAL PRACTICE**
University of Manitoba, Faculty of Dentistry
Winnipeg, MB(204) 789-3331

21 **CURRENT CONCEPTS IN EMERGENCY MANAGEMENT**
ODHA
Kingston, ON1-800-315-6342

21 **PART #1 Periodontics: Etiology, Assessment & Treatment**
PART #2 Peri-implantitis
ODHA
Mississauga, ON1-800-315-6342

21 **BASIC CPR AND AIRWAY MANAGEMENT: A Participation Program**
University of Alberta, Faculty of Dentistry
Edmonton, AB(403) 492-5023

21 **LOCAL ANÆSTHESIA FOR DENTAL HYGIENISTS**
University of British Columbia
Vancouver, BC(604) 822-2626

28 **OLDER DENTAL PATIENTS: Clinical Challenges and Practical Approaches**
Dr. Kenneth Shay
Dalhousie University, Faculty of Dentistry
Halifax, NS(902) 494-1674

NOVEMBER

2 **FAMILY VIOLENCE AND THE DENTAL HYGIENIST**
David Sweet, DMD, PhD
University of British Columbia
Vancouver, BC(604) 822-2626

4 **INFECTION CONTROL**
Heather Bowers, RDA Cathy MacLean, BN
Dalhousie University, Faculty of Dentistry
Halifax, NS(902) 494-1674

10-11 **CLINICAL ORTHODONTIC PROCEDURES:**
A Training Module for Registered Dental Assistants and Hygienists (Instruction/Evaluation Course)
University of Alberta, Faculty of Dentistry
Edmonton, AB(403) 492-5023

11 **NO RECORDS - NO DEFENSE**
ODHA
Peterborough, ON ..1-800-315-6342

17-18 **CLINICAL ORTHODONTIC PROCEDURES:**
A Training Module for Registered Dental Assistants and Hygienists (Instruction/Evaluation Course)
University of Alberta, Faculty of Dentistry
Edmonton, AB(403) 492-5023

18 **RATIONALE FOR ANTIBIOTICS IN PERIODONTICS**
Dr. Dan Price, Dr. Crawford Bain,
Dr. Gary Foshay and Dr. Terrie Logue
Dalhousie University, Faculty of Dentistry
Halifax, NS(902) 494-1674

25 **ORTHODONTIC MANAGEMENT OF THE MIXED DENTITION**
University of Alberta, Faculty of Dentistry
Calgary, AB(403) 492-5023

25 **MORNING SESSION: Oral Cancer and HIV Disease: Early Detection, Control and Management**
AFTERNOON SESSION: The Use of Lasers in Dental Hygiene (Dental Hygiene Degree Completion Program)
JoAnn Guernlian, RDH, PhD
University of British Columbia
Vancouver, BC(604) 822-2626

23-25 **13TH INTERNATIONAL IFDH SYMPOSIUM**
International Federation
of Dental Hygienists
Tokyo, Japan
CDHA at 1-800-267-5235



SELF-ASSESSMENT TEST

Prepared by Sue Raynak, Dip DH a dental hygiene instructor at Confederation College in Thunder Bay, ON with the kind permission of Mosby-Year Book, Inc. for use of Mosby's Comprehensive Review of Dental Hygiene, Third Edition, St. Louis, 1994. Michele Darby, BSDH, MS

Dental Hygiene Care for Individuals with Special Needs

184

1. Xerostomia is a common oral manifestation accompanying all of the following EXCEPT:

a) diurectic drug therapies
b) uncontrolled diabetes mellitus
c) haemophilia B
d) leukemia



2. Use of aspirin is generally contraindicated in persons with all of the following conditions/situations EXCEPT:

a) patients with inflammatory disorders
b) patients taking anticoagulants
c) chronic alcoholism
d) haemophilia A



3. Regulation of sodium intake is most important in:

a) cerebral palsy
b) cystic fibrosis
c) muscular dystrophy
d) fetal alcohol syndrome



4. Dental development may be delayed in:

a) hyperthyroidism
b) hypothyroidism
c) bulimia
d) bronchial asthma



5. The condition which may result in someone being confined to a wheelchair to the extent that it may not be feasible or safe to transfer them to a dental chair is:

a) stroke
b) myasthenia gravis
c) spinal injury at the C7 level
d) spinal injury at the C4 level

6. Palliative care for oral lesions from the disease or treatment effects is indicated in all of the following EXCEPT:

a) leukemia
b) chronic renal failure
c) chemotherapy
d) rheumatic heart disease



7. A condition which is NOT considered high risk for the development of subacute infective endocarditis is:

a) rheumatic heart disease
b) a renal dialysis patient with an A-V shunt
c) indwelling cardiac pacemaker
d) spina bifida patient with hydrocephalus & V-A shunt.



8. Someone who has a visual perceptual problem may encounter difficulty with all of the following EXCEPT:

a) using a mirror
b) demonstrating toothbrushing technique
c) remembering instructions
d) reading pamphlets



9. A client who is not capable of independent oral self-care is probably a(n):

a) man with spinal injury in the lumbar region
b) young adult with Duchenne's muscular dystrophy
c) adult with Type II diabetes
d) adolescent with fetal alcohol effect



10. Obturators are:

a) rubber pacifiers
b) permanent implants and cannot be cleaned
c) devised to assist feeding and speech
d) are autoclavable and dishwasher safe.

Answer Key:

1. d 2. a 3. b 4. b 5. d 6. d 7. c 8. c 9. b 10. c

Prepared by Leanne Carlson Mann, Dip DT, Dip DH

Guidelines for Supportive Periodontal Therapy and When to Refer to a Periodontist

185

This article will review the American Academy of Periodontology's (AAP) position paper on parameters of supportive periodontal therapy. Comments on the position paper, made by Dr. Cheryl Townsend¹⁶ have also been incorporated, where appropriate.

In the development of a periodontal treatment plan, the dental professional must establish a protocol for comprehensive periodontal charting, full mouth radiographs and vertical bitewings for persons with periodontal disease. The panorex radiograph is not adequate for diagnosing and evaluating periodontal disease.

Each general dentist and dental hygienist must determine, through a screening program, those clients that require periodontal therapy. At present, the diagnosis and classification of periodontal disease is based on clinical assessments. The percentage of the practice that comprises clients susceptible to destructive periodontal disease will vary considerably. Literature on the epidemiology of adult periodontitis suggests that 30-40% of the adult population have some level of progressive periodontitis.

A simple way of screening clients is to use the five-minute PSR (Periodontal Screening & Recording) system which was developed by the AAP (American Academy of Periodontology) and the American Dental Association (ADA) with the corporate support of Procter & Gamble. Based on the results of the PSR, clients can be classified by the severity of periodontal disease.

PSR (Periodontal Screening and Recording)

1. For examination, the mouth is divided into sextants (6).
2. A WHO (World Health Organization) periodontal probe is used.

3. The total extent-pocket in each sextant is probed and the highest score for that sextant is noted in a boxed chart.
4. The periodontal probe has calibrations at 3.5 mm and 5.5 mm. The area on the probe between 3.5 mm and 5.5 mm is usually colored. (For the purpose of this article, we are only concerned with PSR scores of 3 and 4.)

5. A PSR score of 3 is given when the probe's colored area is partly within the pocket in any sextant.
6. A PSR score of 4 is given when the probe's colored area is not visible when probing an area within the sextant.
7. PSR scores of 3 or 4 demand appointing the client for a comprehensive periodontal evaluation and appropriate radiographs.

AAP Classifications

These are not classifications of periodontal disease, but rather "case types" identifying the severity of periodontal destruction.

Supportive periodontal treatment (SPT) is an integral part of periodontal therapy for clients with a history of inflammatory periodontal disease. It's an extension of active periodontal therapy that is started after the completion of active periodontal therapy and continues at varying intervals for the life of the dentition or its implant replacements. Failure to comply with an SPT program may result in recurrence or progression of the disease process. This information should be shared with clients to enable them to make informed decisions regarding their treatment of choice. The client may move from active therapy to SPT and back into active care if the disease recurs.

Chronic Gingivitis (CL I)

CLINICAL PRESENTATION:

- most common form of periodontal disease
- 1-3 mm. probing depths
- bleeding on probing, suppuration or other signs
- plaque and calculus usually present
- precedes periodontitis but does not always lead to periodontitis
- is reversible

RADIOGRAPHIC PRESENTATION:

- no bone loss is seen

Mild Chronic Adult Periodontitis (CL II)

CLINICAL PRESENTATION:

- 4-5 mm probing depths
- minimal or no furcation invasion
- bleeding on probing, suppuration or other signs
- may see fremitus or bidigital tooth mobility

RADIOGRAPHIC PRESENTATION:

- no bone loss is seen

Moderate Chronic Adult Periodontitis (CL III)

CLINICAL PRESENTATION:

- 5-6 mm pocket depths
- early to moderate furcation invasion
- bleeding on probing, suppuration or other signs
- often see fremitus or bidigital tooth mobility

RADIOGRAPHIC PRESENTATION:

- minimal to moderate bone loss is seen

Severe Chronic Adult Periodontitis (CL IV)

CLINICAL PRESENTATION:

- 7 mm + probing depths
- furcation involvement
- bleeding on probing, suppuration or other signs
- fremitus and bidigital tooth mobility

RADIOGRAPHIC PRESENTATION:

- severe bone loss

Therapeutic Goals of SPT:

- 1) To minimize the recurrence and progression of periodontal disease in clients who have been previously treated for gingivitis and periodontitis.
- 2) To reduce the incidence of tooth loss by monitoring the dentition and any prosthetic replacements of the natural teeth.
- 3) To increase the probability of locating and treating, in a timely manner, other diseases or conditions found within the oral cavity.

The following items may be included in an SPT visit, subject to previous examination, history, and the judgment of the clinician.

A. REVIEW AND UPDATE OF MEDICAL AND DENTAL HISTORY

B. CLINICAL EXAMINATION (TO BE COMPARED WITH PREVIOUS BASELINE MEASUREMENTS)

1. Extraoral examination and recording of results.
2. Dental examination and recording of results:
 - a) tooth mobility/fremitus
 - b) caries assessment
 - c) restorative, prosthetic
 - d) other tooth-related problems.
3. Periodontal examination and recording of results:
 - a) probing depths
 - b) bleeding on probing
 - c) general levels of plaque and calculus

- d) evaluation of furcation invasion
- e) exudation
- f) gingival recession
- g) occlusal examination and tooth mobility
- h) other signs and symptoms of disease activity.

4. Examination of dental implants and peri-implant tissues and recording of results:

- a) probing depths
- b) bleeding on probing
- c) examination of prosthesis/abutment components
- d) evaluation of implant stability
- e) occlusal examination
- f) other signs and symptoms of disease activity.

C. RADIOGRAPHIC EXAMINATION

1. Radiographs should be current and based on the diagnostic needs of the client. They should permit proper evaluation and interpretation of the status of the periodontium and dental implants. Radiographs of diagnostic quality are necessary for these purposes.
2. The judgment of the clinician, as well as the degree of disease activity, may help determine the need for, the frequency of, and the number of radiographs.
3. Radiographic abnormalities should be noted.

D. ASSESSMENT OF DISEASE STATUS BY REVIEWING THE CLINICAL AND RADIOGRAPHIC EXAMINATION FINDINGS COMPARED WITH BASELINE

E. ASSESSMENT OF PERSONAL ORAL HYGIENE STATUS

F. TREATMENT

1. Removal of subgingival and supragingival plaque and calculus.
2. Behavior modification:
 - a) oral hygiene re-instruction
 - b) compliance with suggested SPT intervals
 - c) counselling on control of risk factors; e.g. cessation of smoking.
3. Antimicrobial agents as necessary.
4. Surgical treatment of recurrent disease.

G. COMMUNICATION

1. Informing the client of current status and alterations in treatment, if indicated.

2. Consultation with other health care practitioners who will be providing additional therapy or participating in the SPT program.

H. PLANNING

1. For most clients with a history of periodontitis, visits at three month intervals may be required initially.
2. Based on the evaluation of clinical findings and assessment of disease status, SPT frequency may be modified or the client may be returned to active treatment.

Supportive Periodontal Therapy Intervals and Guidelines

A. CANDIDATES RECOMMENDED FOR SPT AT TWO MONTH INTERVALS

1. PSR scores of 3 or greater with poor oral hygiene.
2. Moderate periodontal disease with poor oral hygiene (AAP Type III or greater)

B. THREE MONTH INTERVALS

1. Clients with moderate periodontal disease levels who will not see a periodontist.
2. Clients with early to moderate disease with marginal oral hygiene.
3. Clients with early disease, under high stress emotionally and, therefore, more sensitive to the disease process.
4. Clients with removable partial dentures, to allow careful monitoring of abutment teeth for periodontal traumatism.
5. Adult clients undergoing orthodontic therapy. It has been shown that orthodontic movement in the presence of inflammation may cause loss of attachment.
6. Pregnant women during the entire nine months (re-evaluate at termination – hormonal influences of pregnancy can exacerbate periodontal disease and even cause gingival pregnancy tumors.)
7. Clients who smoke. Smokers have more advanced periodontal disease than their non-smoking counterparts.
8. Diabetic clients. Studies have shown that insulin-dependent diabetics have greater levels of periodontal disease than do their non-diabetic counterparts.
9. In general, individuals over 50 years of age who have active periodontitis.

Periodontal disease incidence and severity have been shown to increase with increasing age.

C. FOUR MONTH INTERVALS

1. Early disease with marginal oral hygiene (e.g. young adults, teens).
2. Moderate disease with excellent oral hygiene (PSR 3 or AAP Type II, III).
3. Non-bleeding 4-5 mm pockets with good oral hygiene (PSR 3, AAP type II, early III).

D. SIX MONTH INTERVALS

1. Healthy clients with 1-4 mm pockets.
2. Pedodontic clients.
3. Early gingivitis but oral hygiene improving; client very motivated.

When to refer to a periodontist

1. PSR scores of 4 or AAP type IV's early on:
 - these clients may be outside the comfort zone of the general practice. These are multifactorial, complicated cases that specialists are trained to treat.
2. PSR scores of 3 or AAP type III's:
 - after 6-12 months of disease control therapy and supportive periodontal therapy every three months, but no change for those who still have residual 5+ mm probing depths that continue to bleed.
3. Rapidly progressing periodontitis clients:
 - this group probably accounts for the small percentage of clients who continue to lose their teeth in spite of therapy and who are most urgently in need of specialty care.
4. Recurrent periodontitis:
 - because this would indicate that these clients are either ultrasensitive to plaque, or etiologic factors are not yet completely controlled.
5. Juvenile periodontitis clients:
 - because these clients tend to respond well to active periodontal therapy.
6. Pedodontic periodontitis clients:
 - because little is known about treating these children, and a certain percentage of them go on to have periodontitis in their permanent dentition.
7. Clients who have furcation bone loss:
 - because this pattern of disease causes three to six times as much tooth loss as any other pattern of periodontal disease. Therefore, they have a much higher risk of tooth loss and progres-
8. Clients who are susceptible to frequent abscesses:
 - because this indicates very active, destructive disease with an etiology that is not yet under control.
9. Isolated areas of bone loss:
 - this may indicate an unusual variety of adult periodontitis; these clients are excellent candidates for regenerative surgical treatment.
10. Clients with drug-induced, or other gingival hyperplasia, early on:
 - because treatment will be easiest and most effective then.
11. Isolated areas of more advanced recession:
 - or areas that could benefit from root coverage; specialty periodontics has developed some excellent and quite predictable techniques in the last few years to treat these problems.
12. PSR scores that have asterisks:
 - would be candidates for referral for active treatment of that isolated problem.
13. Clients who need pre-restorative crown lengthening:
 - to preserve biologic width and to increase available preparation length because this is the number one factor that affects long-term root retention.
14. Cosmetic surgery:
 - to increase anterior tooth length to match smile line and to decrease the "gummy smile".
15. Edentulous ridge augmentation.
16. Implant therapy:
 - including placing implants, ridge augmentation around implants, and treating peri-implantitis.

Problems with the management of clients with periodontal disease arise from inadequate diagnosis before treatment, insufficient radiographs and no documentation at SPT or recall appointments. Even clients referred to a periodontist for a specific area should be given a PSR appointment. To provide better documentation should a legal concern arise, the periodontist would also be well advised to complete a PSR, even for a specific referral. Problems frequently arise with less than adequate documentation.

Since referral to a specialist is a form of communication, the general dentist, dental

hygienist and periodontists must keep in constant consultation. In doing so, we can provide complete and comprehensive treatment for our clients.

Selected Resources

- Becker W, Becker B. E., Berg B. E., "Periodontal treatment without maintenance. A retrospective study in 44 patients". *J Periodontol* 1984; 55:505-509.
- Nyman S., Rosling B., Lindhe J., "Effect of professional tooth cleaning on healing after periodontal surgery". *J Clin Periodontol* 1975; 2:80-86.
- Hirschfeld L., Wasserman B., "A long-term survey of tooth loss in 600 treated periodontal patients". *J Periodontol* 1978; 49:225-237.
- Axelsson P., Lindhe J., "The significance of maintenance care in the treatment of periodontal disease". *J Clin Periodontol* 1981; 8:281-294.
- McFall W. T. Jr., "Tooth loss in 100 treated patients with periodontal disease. A long-term study". *J Periodontol* 1982; 53:539-549.
- Westfeld E., Nyman S., Socransky S., Lindhe J., "Significance of frequency of professional tooth cleaning for healing following periodontal surgery". *J Clin Periodontol* 1983; 10:148-156.
- Becker W., Berg L., Becker B. E., "The long-term evaluation of periodontal maintenance in 95 patients". *Int J Periodontics Restorative Dent* 1984; 4(2):55-71.
- Lindhe J., Nyman S., "Long-term maintenance of patients treated for advanced periodontal disease". *J Clin Periodontol* 1984; 11:504-514.
- DeVore C. H., Duckworth D. M., Beck F. M., Hicks M. J., Brumfield F. W., Horton J. E., "Bone loss following periodontal therapy in subjects without frequent periodontal maintenance". *J Periodontol* 1986; 57:354-359.
- Wilson T. G., Glover M. E., Malik A. K., Schoen J. A., Dorsett D., "Tooth loss in maintenance patients in a private periodontal practice". *J Periodontol* 1987; 58:231-235.
- Wilson T. G., "Compliance. A review of the literature with possible applications to periodontics". *J Periodontol* 1987; 58:706-714.
- Mendoza A. R., Newcomb G. M., Nixon K. C., "Compliance with supportive periodontal therapy". *J Periodontol* 1991; 62:731-736.
- Schallhorn R. G., Snider L. E., "Periodontal maintenance therapy". *J Am Dent Assoc* 1981; 103:227-231.
- "The American Academy of Periodontology". In *Proceedings of the World Workshop in Clinical Periodontics*. Chicago: The American Academy of Periodontology. 1989; IX-24.
- Wilson T. G., Kornman K. S., Newman M. G., *Advances in Periodontics*. Chicago: Quintessence Publishing. 1992.
- Townsend C. H., *Periodontal Insights*, 1994.

Editor's Note: There have many articles written since 1990 documenting the dental hygienist's role in the use of microdiagnostics and the need to individualize dental hygiene treatment plans based upon the specifics presented in a case. There are also more specific periodontal disease classifications available through the AAP for incorporation. The PSR screening system is an excellent tool for cursory screening and referral purposes, it is not meant to be all-inclusive or definitive.

Leanne Carlson Mann received her Diploma in Dental Therapy in 1981 and a Diploma in Dental Hygiene in 1982 from WIASS in Regina, Sask. She has been employed with Dr. C.G. Ibbott, a periodontist in Regina, since graduation. Leanne received her dental implant training at the University of Washington in 1988 and has been extensively involved with implant procedures. As well as teaching and providing continuing education courses (primarily in Western Canada), Leanne teaches a dental implant class to the second year dental hygiene students at SIAST. For the past two years students received an accredited hands-on prosthetic course in cooperation with Nobelpharma. Leanne has published a number of articles in *PROBE*, the CDA Journal as well as co-authoring articles for various international journals and she was recently hired by 3i Implant Innovations to lecture in Canada and the U.S.



Dental Hygienist Wanted

- Four days per week — \$200.00 per day
- One month paid vacation per year worked
- 6 to 8 clients per day, small town practice
- 4 hour drive to Jasper
- Snowboarder preferred
- Some relocation assistance available.
- You must quality to have your Alberta Licence.

Send CV to: Box 539, Beaverlodge, AB T0H 0C0
or call (403) 354-2174, leave message

THE MISTAHIA REGIONAL HEALTH AUTHORITY, LOCATED IN
NORTHWESTERN ALBERTA, IS SEEKING A:

Senior Dental Hygienist

Full-time (Part-time would be considered)

To assist in the development and implementation of the dental program. Responsibilities include education, health promotion and clinical activities.

Qualifications: Registered with the Alberta Dental Hygienists Association; valid driver's license; community health experience an asset.

Apply to: Mistahia Regional Health Authority
Human Resources
2nd Floor Provincial Building
10320 - 99 St.
Grande Prairie, AB T8V 6J4
FAX: (403) 538-6156

Deadline for Applications: Open until suitable candidate is found.

South Western Nova Scotia

- RDH to fill in for maternity leave
- December '95 to April '96
- Four-day work week
- Accommodation is provided

Please phone (902) 742-3355
or write to Yarmouth Dental Group,
615 Main St., Yarmouth, NS B5A 1K1

Classified Ad Rates

Fifty (50) words or less, \$26.75 (GST included)
Additional words: \$0.54 per word (GST included)

Closing date for receipt of copy is approximately
one month prior to publication date:

DEADLINE	ISSUE	CIRCULATION DATE
December 10	January/February	January 15
February 10	March/April	March 15
April 10	May/June	May 15
June 10	July/August	July 15
August 10	September/October	September 15
October 10	November/December	November 15

Associations and/or commercial Classified Ad Rates:

1/2 page (\$428.00 GST included)

1/4 page (\$214.00 GST included)

No agency commissions on classified advertising.

Ads will not accepted over the phone, direct
advertising copy with payment to:

Canadian Dental Hygienists Association
96 Centrepoin Dr.
Nepean, ON K2G 6B1

Note: GST does not apply to out-of-country
classified advertisers.

Advertisers' Index

3M	183
BUTLER	OBC
COLGATE	POLYBAG INSERT
DENTICATOR	IBC
DENTSPLY	IFC
PERIOREPORTS	181
PROCTER & GAMBLE	160
WARNER LAMBERT	158, 181

CDHA Member Resource Centre — New Acquisition

PUBLIC VISUAL AIDS

Preventing Tooth Decay: Infants and Toddlers (3 available)

Produced by the Vancouver Health Department

A video developed to reach parents from a range of cultural backgrounds. It includes information about infant feeding and mouth care while baby teeth are erupting and feeding habits are being developed. It also highlights the importance of healthy baby teeth in relation to a child's overall health and well-being. Suitable for parents of infants and toddlers.

Denticator

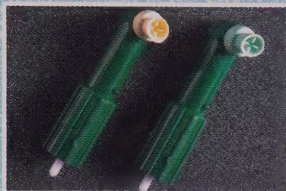
Prophy

Products

Now
Available
Throughout
Canada!

Order From Your
Dealer Today!

DISPOSABLE PROPHY ANGLES



ORIGINAL GREEN

- proven quality—rated #1 for performance by a prestigious independent lab
- excellent cleaning—4 web cup in soft green and regular white



NEW DIAMOND

Longer, deeper prophy cup.

- holds more paste and virtually eliminates splatter
- soft pink or regular white cup

AUTOCLAVABLE PROPHY ANGLES



SHEER PRECISION

- fully sealed—O Ring seals out grit and extends the life of the angle
- easy maintenance—does not require disassembly for lubrication

PROPHY CUPS



EXCELLENT CLEANING & PERFORMANCE

- 4 web cup for quick, quality cleaning
- diamond cup holds more paste and virtually eliminates splatter.

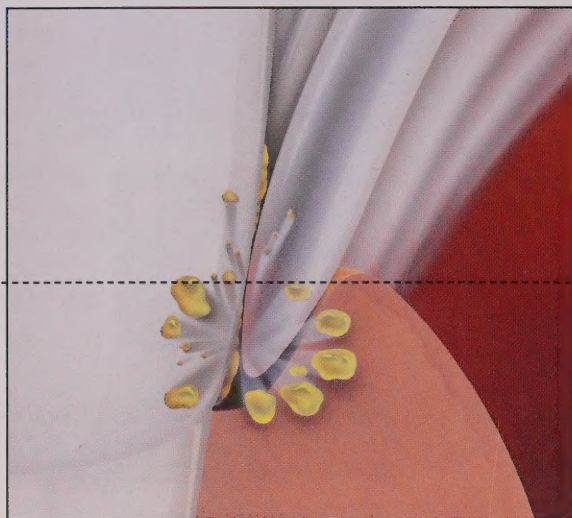
Denticator®

SINCE 1931

For more product information:

DENTICATOR

11330 Sunrise Center Drive, Suite A, Rancho Cordova, CA 95742
916/638-9303



THERE ARE SOME LINES YOU NEED TO CROSS

That's why Butler stepped up to the line—and crossed it—by creating the G-U-M® toothbrush. Its rounded bristles are tapered to a .002" diameter to clean safely and gently, even in the hard to clean sulcus and interproximal areas where plaque accumulates. Texturized bristles effectively pick up and carry away harmful plaque, unlike polished bristles.



And its unique dome-shaped head is designed to reach under the gumline for exceptional plaque removal at any angle. Butler's G-U-M® toothbrush is clinically proven to help reduce and prevent gingivitis.¹ So cross the gumline with the G-U-M® toothbrush and give your patients a proven plaque fighting tool.



John O. Butler Company,
515 Governors Road, Guelph, Ontario, N1K 1C7
1-800-265-8353

Dent

The Canadian Dental Hygienists Association

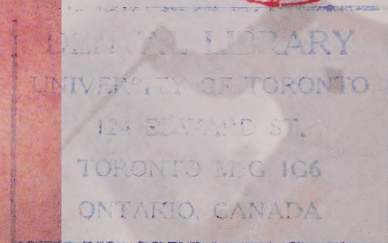
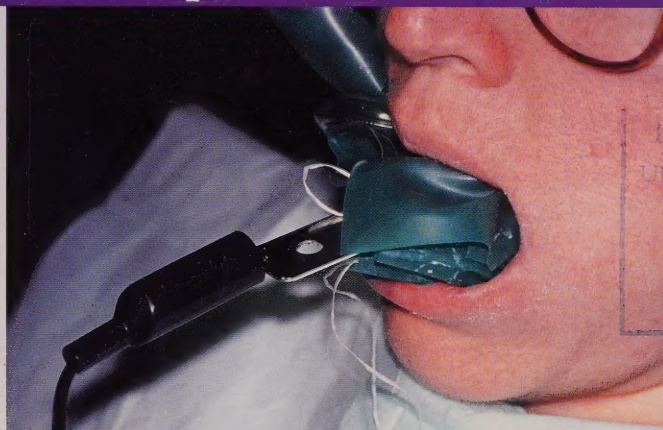
PROBE

JOURNAL

de l'association canadienne des hygiénistes dentaires

Nov/Dec vol. 29 #6

Action Research- What do People Want From Dentistry?



Managing Dentin Hypersensitivity



Verifying the Relevancy of CDHA's Code of Ethics



UNIV OF TORONTO LIBRARY
SERIALS DEPARTMENT
TORONTO, ON
CANADA, M5S 1A5

We've been going to the dentist for 100 years, and we never felt better!

What does it take to serve the Canadian dental profession successfully for 100 years? It takes people – skilled, committed, responsible people, in every corner of the country. It takes the

finest in technology and materials – in touch with latest developments, worldwide. And, as the needs of the dental profession evolve, we will always be there – helping to keep you a step ahead.

**Ash
Temple**
LIMITED
100th
Anniversary

Debbie Ivany
Sales Representative
Calgary, Alberta

Mary Adams
Customer Service Representative
London, Ontario

Omaram Ramlogan
Service Technician
Toronto, Ontario

The Ash Temple Companies: Ash Temple Limited,
Servident, A-Tech, Microbex Aseptics, ATP Industries
Cabinets by A-Tech

'Tis the Season...

Ahh... What a wonderful season... sleigh rides in the snow, carols sung by family and friends around the piano, egg nog served by a crackling fire. Just the picture of relaxation, isn't it?

Well, I must be doing something wrong! I'm not basking in the glow of the season. I'm still in high gear, attempting to get it all done, with this idyllic picture in my mind; hale and hearty around the hearth! It seems most of us dental hygiene Type A personalities are on the same toboggan run, careening towards the holidays rather than jingling through the snowflakes! Here's what my dental hygiene friends and I have been up to this past week in preparation for the season.

My clinical cohorts are squeezing in all those university students, home for the Christmas Break. We do need to accommodate these kids when they're back in town and we love to hear how the student scene is going. But those fifteen hour days are killers! That cafeteria food is Strep. mutans heaven and the plaque is thriving in all those higher centres of learning! We can hear the high hum of the ultrasounds tuned in with the carolers in the nation's offices this week! Not to mention all our regular clients frantically readying for the upcoming festivities; they want those new crowns and veneers this week; they want their teeth sparkling bright and all that gold just gleaming! What ever happened to "all I want for Christmas is my two front teeth"?

My laboratory liaisons are attempting to bed down batches of bacteria for their long winter's nap, capping them in liquid nitrogen tanks; as if this snow isn't cold enough! It's a good thing we have great manual dexterity; those little "bug blankets" are hard to tuck! And what about those hungry little microbes that can't be put on hold over the holidays; they still need to eat (and our version of a festive dinner just won't do). Our poor scientific side kicks are not only stuffing gobblers, they're broiling up brain-heart infusion for microbial munchies!

My buddies in the academic world are under the gun to get those first term marks in. At four courses each and 35 students per course, that's 140 exams to mark (only half of them essay style). No problem! Next term's course outlines and book lists are due and there's only four extra meetings this week for year-end activities. Those calluses may not be from full days of scaling but they are calluses just the same!!

Are we all into the festive spirit yet? Can you see how this picture differs from the opening scene? I love that first image; I'd rather be in that scenario than any one of the following versions, wouldn't you? And I haven't even factored in all the additional duties we pile on ourselves during this time of year just to create the "Perfect Holiday Season". The decorating? Come on, isn't one Victorian tree with hand-made ornaments enough; do we really need two? Aren't we dieting for months after the holidays to rid ourselves of excess party pounds? Maybe just one batch of cookies will do. Cutting, wrapping, tying and taping —wheh, enough to damage those little fingers! Have you tried those new wrapping

bags? Shopping, spending and shopping some more, it doesn't matter if you start early, it expands to fill the time that's left! Such commercialism robs not only the pocket-book and the bank account but also the good-will and charitable account; we have no energy left for real Christmas spirit.

How do I know all this? It's because I fall into the same harried holiday haze every year myself. But this year I'm turning over a new holly leaf. I'm resigning from the seasonal scuttle, halting the holiday haste, foregoing the festive fly. I am going to stop and smell the bayberry... here's my plan.

Everyone is getting one present and one present only. Everyone will wrap what they purchased themselves, regardless of the matching of patterns or the colour coordination of bows. We will not enter the neighbourhood Festival of Lights competitions; candles in the window will do. We will cut the yardage of bunting throughout the house by at least 50% (leaving still enough wound throughout each room and around banisters to harness all of Santa's reindeer should he need additional help). We will do a family marathon cookie bake, one dough mixture with enough cookie cutters to have every conceivable shape of holiday icon imaginable. Decorating of these delicacies will be drizzle and sprinkle and onto the plate (if not consumed enroute). We will take little packages of these edibles to our close neighbours and elderly shut-ins with time for a short visit and holiday greetings. We will put that new computer to the task and write one family letter reviewing our highlights of the year. We will print it on lovely seasonal letterhead and have a family address session to get them stamped and out the door. This serves a double purpose: it sends holiday greetings to our friends and family and it forces us to count our blessings and review all of the fun things that have occurred in our lives over the past 365 days. Regardless of what is done (or not done) by December 23, we will all go (teenagers included), as a family, on a healthy and energetic outing (meaning literally out in the snow and not out in the mall!!). We will sing on the way (perhaps to the ski hill) and we will drink homemade eggnog (can't give that up regardless of calories or time) and we will laugh, hug and rejoice in our existence. Isn't that what the season is all about? Happy holidays to you and yours!



Marilyn Goulding served as *Probe's* Scientific Editor from 1989-1994 and is currently a member of the journal's Editorial Board. She is a Dental Hygiene Instructor at Niagara College and is currently working towards her Masters of Science at the University of New York at Buffalo.

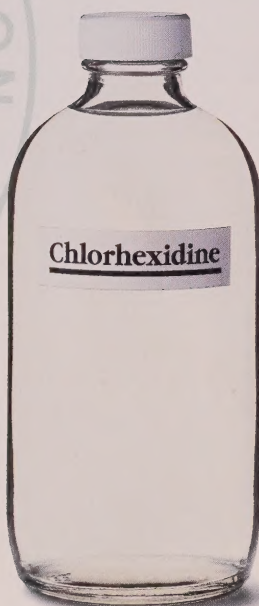


LISTERINE*

FIGHTS GINGIVITIS

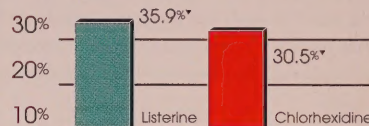
AS EFFECTIVELY

AS CHLORHEXIDINE.



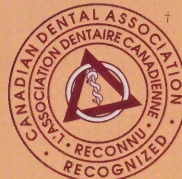
A recent clinical study¹ concluded that Listerine inhibited the development of gingivitis[†] as effectively as 0.12% chlorhexidine. In fact, Listerine reduced the development of gingivitis by almost 36% over brushing and flossing alone¹.

% REDUCTION OF GINGIVITIS SCORES VS. CONTROL AT SIX MONTHS



* Equivalent for gingivitis reduction at 6 months ($p < 0.001$)¹

Unlike chlorhexidine, Listerine works without causing side effects like extrinsic tooth stain¹. Listerine is the only oral rinse, prescription or nonprescription, to receive the Canadian Dental Association's seal of recognition for efficacy in the reduction of plaque and gingivitis².



Twice daily rinsing with Listerine works synergistically with brushing, flossing and your professional care¹. If you'd like to find out more about Listerine call 1-800-683-1650. We'll give you all the facts.



LISTERINE FIGHTS GINGIVITIS
WITHOUT STAINING

[†] Listerine helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care. * CANADIAN DENTAL ASSOCIATION[†] Gingivitis was evaluated using the Modified Gingival Index: Listerine. Do not swallow. Not to be used by children under 12 years of age. Keep out of reach of children.

TM Warner-Lambert Company Warner-Welcoming Inc. use Scarborough, Ontario M1L 2N3.

1. Overholser CD et al. Comparative effects of two chemotherapeutic mouthrinses on the development of supragingival dental plaque and gingivitis. J Clin Periodontol 1990;17:575-579.

2. Data on file, 1995.

CONTENTS

193 EDITORIAL

'Tis the Season...

197 PRESIDENT'S MESSAGE

Shaping our Future

199 NEWS

202 SCIENTIFIC

What Do People Want From Dentistry?

An Action Research Approach

By Barbara Drewry, Dip DH, BDS Sc Candidate,

Rita Chu, Dip DH, BDS Sc Candidate and

Bonnie Craig, Dip DH, MEd

FEATURES

- 212 Verifying the Relevancy of
CDHA's Code of Ethics

- 221 Annual Index

214 PRACTICE PROFILE

The Speaker Circuit — Another Career
Option for Dental Hygienists

Featuring Danné Mykietyn-Sherstobitoff, RDH, BS

216 CONTINUING EDUCATION

215 SELF-ASSESSMENT TEST

Carpal Tunnel Syndrome

Prepared by Marie Papadopoulos, Dip DH,

Catherine Thom and Brenda Leggett



COVER:

CONFERENCE '96 (see pages 224 & 225)

Interdependence and Independence:
Striking a Balance in Calgary

*(Thanks to the Calgary Convention and
Visitors Bureau for providing the cover photo)*

218 ANNOTATED BIBLIOGRAPHIES

Effect of a Pre-Brushing Rinse
on Dental Plaque Removal

Evaluation of Two At-Home
Bleaching Systems

Prepared by Carol Barr Overholt, Dip DH

219 ABSTRACTS/CRITIQUES

226 CASE STUDY

Dentin Hypersensitivity

*Prepared by Leanne D. Carlson-Mann,
Dip DT, Dip DH*

228 CLASSIFIEDS/MEMBER RESOURCE CENTRE: NEW ACQUISITIONS

EDITORIAL DIRECTOR/SCIENTIFIC EDITOR: D. Landry,
Dip DH, Dip DN, BA, BV/T Ed

MANAGING EDITOR: J. Edgar, BJ

STATISTICAL REVIEWER: R. Dunford, BSc, MSc

CONTRIBUTORS

Carol Barr Overholt, Dip DH
Leanne Carlson-Mann, Dip DT, Dip DH
Nancy Neish, BA, Dip DH, MEd
Brenda Fortune, Dip DH

COPY EDITOR: S. Erwin, BJ

EDITORIAL BOARD

E. Brownstone, BA, Dip DH, MEd
S. Amer, Dip DH, MS
L. Boomhour, Dip DH
M. Goulding, Dip DH, BSc
L. Guest, Dip DH, BHE

DESIGN: Edels-Marcotte

Published six times a year by the Canadian Dental Hygienists
Association, 96 Centrepointe Drive, Nepean, Ontario K2G 6B1
Tel (613) 224-5515

Canada Post Publications Mail Registration No. 5793

CANADIAN POSTMASTER: Notice of change of address and
undeliverables should be sent to:

Canadian Dental Hygienists Association
96 Centrepointe Dr.
Nepean, ON K2G 6B1

Subscriptions \$69.55 (GST Included) in Canada, \$110.00 Cdn
for US & \$115.00 Cdn elsewhere. Fifty cents per issue is allocated
from membership fees for journal production. All statements are
those of the authors and do not necessarily represent CDHA, its
executive, or its staff.

ADVERTISING AND SUBSCRIPTIONS:

Keith Health Care Communications
1382 Hurontario St.
Mississauga, ON L5G 3H4
(905) 278-6700

CDHA 1995
6176 CN ISSN 0 834-1494
GST Registration No. R106845233

CDHA CENTRAL OFFICE STAFF

Executive Director: Carol Matheson Worobey
Manager, Publications & Conference: Janice Edgar
Financial Coordinator: Monique B. Rock
Member Services Coordinator: Sandra Vanwart
Member Services Assistant: Sue Turcotte
Administrative Assistant: Donna Awrey

All CDHA members are invited to call CDHA's Central Office
toll-free, with their questions/inquiries:

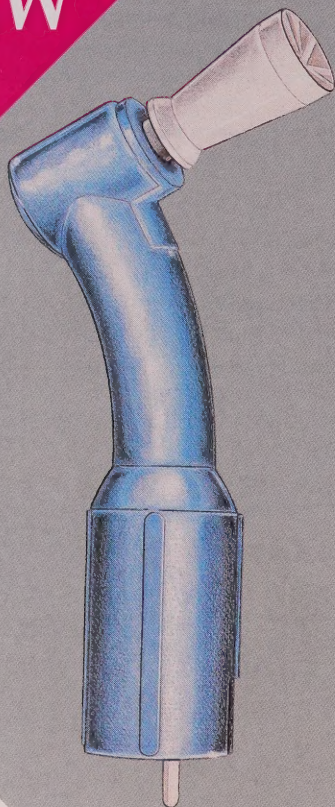
1-800-267-5235, Fax (613) 224-7283

We look forward to serving you.

The Canadian Dental Hygienists Association's Journal, *Probe*, is the
official publication of CDHA. CDHA invites submissions of original
research, discussion papers, and statements of opinions pertinent
to the dental hygiene profession. All manuscripts are refereed anony-
mously. Contributions to *Probe* do not necessarily represent the
views of the CDHA, nor can CDHA guarantee the authenticity of
the reported research. Copyright 1995. All materials subject to this
copyright may be photocopied for the non-commercial purpose of
scientific or educational advancement.

We're Bent on Making Your Prophies Easy . . .

NEW



the **CONTRA DISPOSABLE™ ANGLE**

by
Young Dental

- ◆ **Contra**
- ◆ **Control**
- ◆ **Comfort**
- ◆ **Convenience**

We're doing back-flips over our new angle! The Young Contra Disposable Propy Angle is the only disposable angle with a contra-bend in the neck, providing the control and comfort you're used to. It allows for greater access and reduces fatigue. And it's all available in a disposable. An easier cleaning is just around the bend.



13705 Shoreline Court East • Earth City, MO 63045
800-325-1881 • 314-344-0010

Contact Your Dental Supplier To Order

Shaping our Future

Dental hygienists in Canada seem to agree that this is a period of rapid change for our profession. Developments occur so rapidly across the country that it is often hard to keep track. Sometimes the changes seem overdue and are welcome; sometimes they are unwelcome and produce anxiety.

We are always better prepared to cope with changes if we have an understanding of the factors which influence them. I want to take this opportunity to share with you what I see to be some of the major forces which will shape our future as dental hygienists in Canada.

Clearly, demography and epidemiology are factors of major importance. Canada is an aging nation, and every province will soon have populations of which 16-20% are over the age of 65. This trend is happening at the same time that more and more people are retaining some or all of their teeth for their entire lives — quite a change from just a few decades ago. So, as a nation we have a growing population of seniors who will present a different set of oral health needs than before. These needs will be primarily for preventive and maintenance care, the domain of dental hygienists.

Epidemiological trends in caries seem to indicate that caries rates in children are in decline. But a closer look tempers this good news. Caries rates for certain segments of the population still remain unacceptably high: teens, children of new immigrants, seniors, first nations children, and groups characterized by poverty, such as inner city children. There is still a tremendous amount of preventive work to be done with these groups. My conviction is that success in reducing caries for these groups will depend largely on community efforts, in which dental hygienists can play a significant role.

Economics is always an important influence in health care. Everywhere planners are looking for ways to contain or reduce costs. Dental care, because it is funded mostly in the private sector, has felt little of this pressure to date, but the search for more effective, efficient care is going to be felt in oral health as well as in other areas of health care. If options for preventive oral care other than those presently available are more economical, they will be pursued.

Part of this pursuit will arise from growing consumer power. Consumer power is already in evidence in many areas of health care. We see such things as greatly increased public representation on professional regulatory bodies, clients demanding to be more a part of the decision-making process, and an interest in exploring different venues and different providers for health care services.

Health promotion, whether it is defined as population health or some other identifier, is becoming increasingly important in our nation. The awareness that all aspects of our lives and environment are interrelated in their effects on health is becoming well established. Dental hygienists, whatever their work setting, are becoming

more and more cognizant of their role in the broader issues relating to health, and taking appropriate action.

Research will continue to be a most important factor in our future. In dentistry and dental hygiene, there is a movement away from empirically-based care toward a research-based outlook in planning, implementing and evaluating care. It has always been my contention that the real job for dental hygienists is to take what research has shown about the prevention of oral disease and the maintenance of oral health, and make it work effectively in the community. There has been a tremendous explosion in oral health research in recent years. As dental hygiene is increasingly recognized as a knowledge-based, as contrasted to a technique-based discipline, its ability to translate research — including that in the fields of health promotion and behavioural sciences — will make it an even more important contributor to oral health in the future.

Some of the factors which will shape our future are easier to identify than they are to qualify. Sociological issues such as gender, equity and power relationships have always affected our profession, and will continue to do so for some time. There is no question that many of the tensions which exist between dental hygiene and organized dentistry are rooted in such issues. Sociologists tell us that the basic reason for these tensions is one which exists between many groups: all institutions resist change, and power is never given up willingly. In many provinces, self-regulation for dental hygiene has been (and in some provinces still is) resisted by dental groups because it represents a loss of power.

In spite of recent and ongoing tensions, I tend to be optimistic about the relationships between dentistry and dental hygiene. We disagree on some issues, but there is much more that we share, rooted in a common sincere interest in providing the best possible oral health care to as many people as possible.

The factors identified above are only a few of those which will influence the future of dental hygiene in Canada. But the one which may be most influential of all has not been mentioned: Canadian dental hygienists themselves. We are a profession of well-educated, intelligent, thoughtful people primarily concerned, in our professional lives, with improving the lives of Canadians through prevention of disease and the maintenance of health. Our numbers, knowledge and dedication enable us to be a major force in determining the future of dental hygiene in Canada.

The only way to ensure our future is to work at creating the future. We have the opportunities, the resources, and the will to do it.

Margery Forgay, Dip DH, BEd, MA, LLD(Hon)



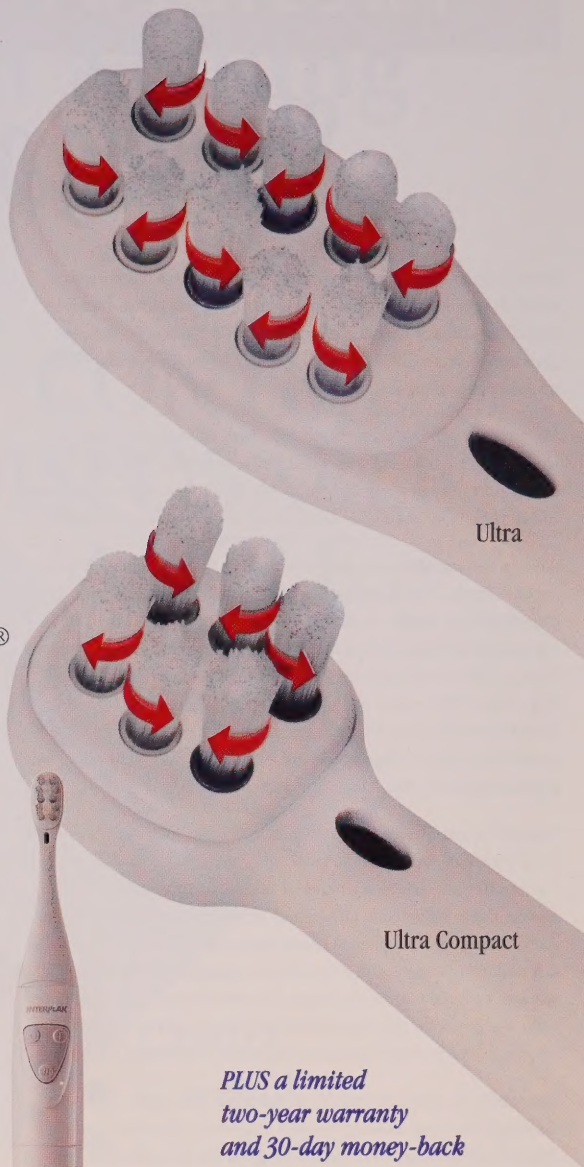
Take a Close Look at the All New INTERPLAK[®] Ultra Line.

The most researched and tested INTERPLAK models ever, totally re-engineered by Bausch & Lomb. The new INTERPLAK Ultra Power Plaque Remover models offer a choice of compact and full-size brushes to meet the needs of all your patients. Both feature quick twist brush removal, a smaller, lighter handle, and patented, clinically proven INTERPLAK technology that is easier than ever to recommend.

For more information, call **1-800-668-7510**.

TAKE AN EVEN CLOSER LOOK

Try the all new INTERPLAK Ultra Power Plaque Remover, full-size or compact model, at the low price, reserved exclusively for dental professionals and their staff, of **\$39.95**. *Call today for details.*



*PLUS a limited
two-year warranty
and 30-day money-back
guarantee!*

38 USC 360

INTERPLAK[®]
Power Plaque Remover

INTERPLAK is a registered trademark of Bausch & Lomb Oral Care Division
© 1995 Bausch & Lomb Oral Care Division

Canada's First Dental Hygiene Clinic Opens for Service

NEWS

On June 22, 1995 the Kelowna Mission Dental Hygiene Clinic, owned and operated by a dental hygienist, opened for service. At the clinic, dental hygienist Arlynn Brodie provides preventive and therapeutic oral hygiene care to local clients, introducing a new treatment option in the delivery of dental hygiene care.

Recent legislative changes enable British Columbia dental hygienists to deliver preventive and therapeutic oral hygiene services, outside the regular dental office setting, to clients who have had a dental examination within the previous year. Dental treatment needs are referred to local dentists if the client does not already have a regular dentist.

Arlynn says one of the biggest rewards, besides being a proprietor of her own practice, is bringing people who have not sought oral health care for many years "back into the dental fold". It creates a winning situation for the clients, her clinic and the dental community. For individuals whose annual oral check-ups have indeed become a visit to receive dental hygiene

services, the new option means increased choice to affordable, quality care.

Another reward is the potential to enhance access to traditionally underserved groups, such as residents of long and short term care facilities. There are 32 care facilities in Kelowna and while oral assessments are carried out for these residents by public health staff, there are currently limited resources for providing dental hygiene services. Arlynn is negotiating with some of these facilities to bring the care to them. In carrying out her oral hygiene practice, she is also available to consult with Kelowna's dentists to help ensure identified dental treatment needs of the clients are also met.

Arlynn says breaking new ground is rewarding. She believes in expanding opportunities for care, and she has strong support from colleagues and members of the public.

In June 1995 the Canadian Dental Hygienists Association's Board of Directors adopted a Complementary Practice Position Statement supporting the efforts of dental hygienists like Ms Brodie who are prepared to break

new ground and create new avenues of access to oral health care for the public. "The CDHA supports, encourages and affirms those dental hygienists who choose to practice their profession in any environment congruent with their experience, education and interest."

This follows the Association's Management of Dental Hygiene Care statement, adopted in 1993, which supports increased consumer choice to affordable, accessible dental hygiene care.

CDHA President Margery Forgay says these statements reflect consumer demands for more choice and alternatives to oral health care services. Dr. Forgay says that as the public discover they can access quality, preventive oral health care with reasonable savings through direct access to the dental hygiene profession, demands for this option will intensify. "It's a matter of economics. As dollar value shrinks, and the emphasis on preventive care grows, the dental hygiene profession will strengthen its traditional role as a key player in the delivery of care at the community level."

199

University Professor with Dental Hygiene Background Serving as Acting Dean, Faculty of Dentistry, Université Laval

Diane Lachapelle has been serving as Acting Dean of the Faculty of Dentistry at Université Laval since May 1995. Ms Lachapelle was hired as a professional dental hygienist by the University in 1975 and promoted to the position of Assistant Professor in 1984. She was awarded tenure in 1991 and served as Assistant Dean and Associate Dean of the Faculty of Dentistry prior to becoming Acting Dean when former dean, Dr. Roland Vallée, suffered a heart attack and died.

Ms Lachapelle earned a Bachelor of Science with a major in Dental Hygiene from the University of Montreal in 1974. (At that time the University offered a 3-year dental hygiene degree program through its Faculty of Dentistry.) She also holds a Masters in Dietetics and has been

actively involved in research. She has published numerous articles on the impact of nutrition on dental health and preventive dentistry among them the following, "Fibre intake in elderly individuals with poor masticatory performance" (*J Can Dent Assoc* 1994; 60(5): 443-449), "Nutrient intake and gastrointestinal disorders in edentulous elderly" (*J Prosthet Dent* 1993; 70: 468-473), "Dental habits associated with tooth brushing among children" (*J Dent Res* 1992; 71: 670) and "Factors affecting the ingestion of fluoride dentifrice by children" (*J Public Health Dent* 1992; 52: 222-226). Ms Lachapelle is also an active member of the International Association of Dental Research (IADR) and has presented numerous abstracts at IADR symposiums over the past several years.

As Acting Dean, Ms Lachapelle is responsible for a faculty of about 40 professors and 60 additional staff who work in the student clinic and elsewhere in the Faculty. The Faculty serves a student body that accepts 46 first-year dental students. In addition, the Faculty includes research activities within a Research Group consisting of 40 members including dental faculty professors, science and engineering faculty professors and students studying at the masters and PhD levels. She continues to maintain her license to practice dental hygiene by working at the University's Student Clinic, a position she has maintained for more than 20 years.



Ordre des Hygiénistes Dentaires du Québec Appoints New General Director

Ms Suzie Prince became General Director and Secretary of the Ordre des Hygiénistes Dentaires du Québec on September 1, 1995. Ms Prince succeeds Monique Goudreault who held the position for the past three years.

Ms Prince is currently working towards her Certified Management Accounting (CMA) designation and holds a Master's in Business Administration from École des Hautes Études Commerciales (HEC) and a Bachelor of Business Administration from the University of Québec at Montréal. She also has a Certificate in Psychology from the University of Québec at Montréal.

Suzie joined the Ordre as its Coordinator of Professional Services in September 1994. From 1990-1993 she was the General Director for

the Committee organizing the 325th Anniversary celebrations for the founding of Boucherville. She also worked as a Development Officer for Conser Inc., an organization specializing in regional industrial development, from 1987-1990.

Suzie is an active community member and was presented with Boucherville's Woman of the Year award in 1993. She has worked voluntarily with handicapped children for many years and served as a member of the para-Sport Rive-Sud for paraplegic athletes from 1989-1992.



CDHO President Earns MA

Lynda McKeown, President of the College of Dental Hygienists of Ontario recently earned a Master of Arts in Sociology from Lakehead University in Thunder Bay. Lynda taught dental hygiene at Confederation College in Thunder Bay from 1967 to 1987 and was an 'Official Observer' to

Ontario's Royal College of Dental Surgeons from 1980 through 1993. The research she undertook to achieve her MA focused on the social structure and professional organization of dentistry and dental hygiene. She hopes her research will ultimately help to increase utilization of dental hygiene services in rural and remote areas.



Nova Scotia Care Facility Provides Dental Hygiene Care to Residents

An article appearing in the August 1995 issue of the Provincial Dental Board of Nova Scotia's newsletter documented a historical decision that reflects positively on the province's dental hygiene profession. The article noted that Gables Lodge, a 95-bed Level II Care facility located in Amherst, NS applied for and received the Board's written permission to have a dental hygienist provide hygiene care to its residents without the direct supervision of a licensed dentist.

By provision of the Dental Act and Regulation N° 7 – Dental Hygienists, the Board may grant written permission to an authority, institution or Board to employ a licensed dental hygienist. In all cases of therapeutic care, the written permission requires that a licensed dentist examine the patient and provide direction to the dental hygienist through verbal or written instructions, standing orders, or general policy statement. The dental hygienist may then carry out the hygiene therapy without supervision of the dentist.

Aquafresh Student Hygienist Scholarship Program

WHAT IS THE AQUAFRESH SCHOLARSHIP PROGRAM?

The Aquafresh Scholarships are awarded to undergraduate dental hygiene students for their contributions to the advancement of dental hygiene.

THE PROGRAM CONSISTS OF:

- Two – \$1,000.00 scholarships to be used toward dental hygiene education expenses.
- Air travel expenses to and from the CDHA Annual Professional Conference and four nights accommodation at the conference hotel. (Conference registration will be paid by the CDHA.)

WHO IS ELIGIBLE?

- All undergraduate dental hygiene students.
- All applicants must be CDHA student members.

HOW TO APPLY

- All applicants must submit, in writing, a description of their involvement with the Canadian Dental Hygienists Association.
- All applications must be accompanied by the endorsement of two CDHA members.

CRITERIA FOR JUDGING

- Demonstrated involvement in the Canadian Dental Hygienists Association
 - e.g. • Submitted material for publication in the CDHA *Journal* and/or *Explorer*.
 - Demonstrated a keen interest in national dental hygiene issues.
 - Demonstrated qualities of leadership.
 - Participated in National Dental Hygiene Campaign.
 - Participated in national/international conferences such as table clinic presentations, poster sessions, presentations, etc.
 - All applicants must describe how they have promoted oral health and the profession of dental hygiene in the community.

Note: The successful candidate must agree to submit, for publication, an article outlining his/her accomplishments/involvement.

APPLICATION DEADLINE

Applications are to be submitted to CDHA's Central Office by April 1, 1995.

Continuing Research Opportunities for Dental Hygienists

The Canadian Dental Hygienists Association recognizes the importance of developing a specific body of knowledge relevant to the practice of dental hygiene. In an effort to encourage and promote its development the Association offers two key grant opportunities for individuals conducting dental hygiene research.

In 1995, Ellen Brownstone, Director of the University of Manitoba's School of Dental Hygiene and a PhD candidate at the University of Manitoba was awarded the CDHA Dental Hygiene Research Grant. The CDHA Dental Hygiene Research Grant was established in October 1993, following the Association's hosting of the 1993 North American Research Conference held in Niagara Falls, Ontario. Ellen is conducting research at the doctoral level

that focuses on the culture of dental hygiene and she is the first recipient of the CDHA Dental Hygiene Research Grant.

Joanne Clovis, former director of Dalhousie University's School of Dental Hygiene was the 1995 winner of the Procter & Gamble/CDHA Graduate Student Research Award. Joanne is currently studying full-time in the interdisciplinary PhD program at Dalhousie University. Past award recipients are as noted below:

1992 – *Charla Lautar*

1993 – *Lynda McKeown*

1994 – *Ellen Brownstone*

1995 – *Joanne Clovis*

CALL FOR APPLICANTS CDHA /Procter & Gamble Graduate Student Research Award

OBJECTIVE: To promote the research training of Canadian dental hygienists in research oriented Masters or Doctoral programs

GENERAL DESCRIPTION: An award of \$5,000 will be given annually to a highly qualified candidate enrolled as a graduate student in a Masters or Doctoral program.

ELIGIBILITY: Applicants for this award must be Canadian Dental Hygienists who are active, associate, student or life CDHA members, in good standing, who may be studying full or part time. Applicants must present evidence of having been accepted by a recognized academic institution.

APPLICATIONS: The deadline is **April 1, 1996**. Applications must be submitted on forms available from CDHA's Central Office.

DURATION: This award is made for one academic year for full-time students or the equivalent for part-time students. The award may be renewable for one additional academic year or its equivalent on receipt of a satisfactory progress report. The progress report must detail work to date and include any pre-prints or reprints arising from the work. Any request for renewal of this award should be accompanied by a letter from the research supervisor and one other referee.

CONDITION OF SUPPORT: On completion of studies, recipients of this award agree to provide a bound copy of the thesis or project to CDHA's Central Office.

CALL FOR APPLICANTS CDHA Dental Hygiene Research Grant

OBJECTIVE: To support Canadian Dental Hygienists engaged in research that enhances the dental hygiene profession's ability to promote health and well-being.

GENERAL DESCRIPTION: A grant of \$5,000 will be awarded annually to a Canadian Dental Hygienist involved in qualitative or quantitative research as a principal investigator or co-investigator. Preference will be given to research projects relevant to the discipline of dental hygiene and the goals of the CDHA.

ELIGIBILITY: Applicants for this grant must be academically qualified Canadian Dental Hygienists who are active or life CDHA members in good standing. Evidence of academic credentials at the Masters and/or PhD level is required.

APPLICATIONS: The deadline is **March 31, 1996**. Applications must be submitted on forms available from CDHA's Central Office.

CONDITION OF AWARD: On completion of the research project, recipients of this grant agree to provide a written report for the *Probe* or reprints of journal articles to CDHA's Central Office.

For further information and/or an application form for the Aquafresh Student Hygienist Scholarship Program, the CDHA Dental Hygiene Research Grant, or the CDHA/Procter & Gamble Graduate Student Research Award, contact:

Canadian Dental Hygienists Association
CentrepoinTE Chambers, 96 CentrepoinTE Dr.
Nepean (Ottawa), ON K2G 6B1

by Barbara Drewry, Dip. D.H., BDS Sc Candidate,

Rita Chu, Dip. D.H., BDS Sc Candidate and Bonnie Craig, Dip DH, MEd

What do people want from dentistry?



AN ACTION RESEARCH APPROACH

Abstract

Issues surrounding access to dentistry will be presented from information gathered during an action research project targeting three population groups. This project was conducted by students in the Dental Hygiene Degree Completion Program at the University of British Columbia and by the dental hygiene diploma students at Camosun College. In contrast to typical empirical dental studies which are validated by statistical presentation, action research uses an interview process and qualitative analysis to identify what people really think, believe and do. College students, independent-living seniors, and low-income families were interviewed to determine how they accessed dental care, how they liked their dental visits, and how they preferred to receive dental health information. Cost, convenience and fear of pain were significant factors which influenced whether people attended the dental office. Caring dental health providers, comfort and pleasant physical surroundings were important features of a dental office visit. Dental health practices, such as brushing and flossing, were predominantly learned from the dental profession at the dental office, through school programs, or from parents at home. This data challenged our previous assumptions about these groups. As the goal of this type of research is "action", the information gathered will lead to action plans at the community and professional level.

Résumé

Le présent article fait état d'une étude de milieux menée auprès de trois groupes de population sur les problèmes d'accès aux soins dentaires. La recherche a été faite par les étudiantes du "Dental Hygiène Degrée Completion Program" de l'Université de Colombie-Britannique, et ceux du "Dental Hygiène Diploma", du collège Camosun. Contrairement aux études dentaires typiquement empiriques, dont la validité repose sur les données statistiques, l'étude des milieux a recours aux entrevues et à l'analyse qualitative pour cerner la pensée des gens, leurs croyances et leurs actions. On a donc interrogé des collégiens, des personnes âgées autonomes et des familles à faible revenu pour savoir dans quelle mesure ils ont accès aux soins dentaires, s'ils aiment leurs visites à la clinique et de quelle façon ils préfèrent être informés sur le sujet. Les principaux facteurs qui affectent la consultation chez le dentiste sont le coût, la commodité et la crainte de la douleur. On attache aussi beaucoup d'importance à l'attention que portent les personnes préposées aux soins, au confort et à l'ambiance agréable des lieux. Quant aux pratiques d'hygiène bucco-dentaire, tel le nettoyage des dents avec la brosse et la soie dentaire, c'est surtout des professionnels dentaires, au cabinet du dentiste ou par le biais des programmes scolaires, ou encore des parents à la maison, qu'on les a apprises. Ces constatations remettent en questions les hypothèses précédentes concernant ces populations. Comme ce type de recherche a pour objet de mener à l'action, l'information servira à élaborer des plans d'action au sein du milieu comme de la profession.

Introduction

Access to dental health care is an important issue for both the public and the professions of dental hygiene and dentistry. According to Canada's Health Promotion Survey 1990 Technical Report¹, statistics show that 75% of Canadians attended the dental office within the previous year. These are encouraging statistics. Other reports show lower figures, with only 60% attending.² Several groups are known to be poor utilizers of dental health services, including those with low income, the elderly, and those aged 20-24 years.¹ Why do 25-40% of Canadians not access dental health care?

Dentistry has tended to focus its research on empirical studies to further the body of evidence supporting specific treatments and measures of efficacy and effectiveness. This has left a void in the area of research on patient/client/consumer-based outcomes of care.³ It does not matter how perfect a diagnostic test is, how excellent a treatment modality might be, nor how flawlessly a restorative material performs, if the people do not want, cannot afford, or do not come to the dental office to learn about these wonders of dentistry. Dental professionals have looked at these issues in the past from their point of view — why people *should* come to the dental office. We have not asked the patient/client/consumer what *they* think is best for their oral health — why they *would* come to the dental office.⁴

Health care is heading in a new direction. Steered by government and the health professions, fuelled by pressures to reduce costs and increase access to services, health care reform has set its course. The Royal Commission on Health Care and Costs (1991) looked at the delivery of health care services in British Columbia, and addressed the changes that would need to take place to ensure efficiency and equitable access for all residents.⁵ A report by the Institute of Medicine entitled “The Future of Public Health” called for “policy development and leadership that foster local involvement and a sense of ownership, that emphasize local needs, and that advocate equitable distribution of public resources and private activities commensurate with community needs.”

The WHO* defines health promotion as “the process of enabling people to increase control over, and to improve, their health.”⁶ The Epp report entitled “Achieving Health for All: A Framework for Health Promotion”⁷ stated that the three health challenges facing Canadians were reducing inequities, increasing the prevention effort, and enhancing people’s capacity to cope. Recommended strategies were to foster public participation, strengthen community health services, and coordinate healthy public policy. These reports and recommendations were proposed to improve the odds that under-served people could attain an appropriate level of health.

As part of the “achieving health for all” strategy, health care (including dental health care) will become more community based, with the decision-making happening at the community level and with active involvement by the people receiving the benefits of this care. A method for furthering this involvement is through “action research.”

Action Research

In “Research for Change: Participatory Action Research for Groups”⁸, research is defined as “the systematic collection and analysis of information” and action research as “the systematic collection and analysis of information for the purpose of taking action and making change.” Participation of the community is vital to the process of action research, in order to learn about how people actually experience the specific WHO* (World Health Organization) issue or problem, and ultimately which actions they believe will make a difference to their lives. This document also states that the key difference between action research and traditional research methods is “the development of strategies and programs based on real life experience rather than theories or assumptions.” By involving

the community group in the process, it helps people understand the issues better, and empowers them by building skills, confidence, and knowledge.

The main question in action research is usually *how* — how do people experience a situation, or how can we change things? Questions are usually posed in an interview, but focus groups and questionnaires are also used. The questions are open-ended to encourage people to share their opinions and experiences. People may not think that their lives are important, or that their opinions could make a difference. Action research interviews may help people assert their right to be heard and understood.

This research may be undertaken to encourage people to change, government to make policy, or to obtain funding. Often by doing action research, we can check our assumptions for validity and gain a clearer picture of our community.

People take part in action research in various ways. Their participation may range from minimal, where the researcher shares findings with participants, to maximal where the group controls the entire process. Abbot states that “movement along this continuum becomes easier with the increased experience, knowledge, and self-awareness of both the research consultant and the participants.”⁹

Purpose

This project was developed to determine people’s opinions on what makes it easier or more difficult to attend a dental office, what they like and dislike about a dental office visit, and how they receive their dental health information. The authors wanted to answer the question “Why do 25-40% of Canadians not access dental health care?” In looking more to social and behavioural sciences for assistance in explaining, predicting, and understanding people’s attitudes and actions in relation to dental health, the action research approach seemed particularly pertinent and appropriate for this project. It is hoped that this initial research project will establish a baseline of information that will be used to initiate community action around the issues raised, as well as help the dental and dental hygiene professions address the issues in their practice settings.

Demographics

Sixty-seven people, consisting of 40 college students, 17 independent-living seniors, and 10 low-income families, participated in the study. The elderly resided in a small rural city in central British Columbia, and the other groups were from an urban area on the south coast of the province. Demographic data is presented in Table 1.

The participants were mostly female, and annual gross incomes were generally below \$30,000. (In 90% of low-income families, at least one child was under 6 years old, and in 50% of families all children were under 6 years old.) The majority of college students were in the 21-25 year age range, and seniors were between 60-70 years. The low-income group had the least education — 40% had not completed high school. The majority of college students and seniors visited the dentist and dental hygienist at least yearly. However, 35% of seniors and 40% of low-income families had never seen a dental hygienist. Eighty percent of low-income families had not seen a dentist for more than one year, with 20% of these

Table 1:

Action Research Participant Demographics

	Elderly N=17	Low Income N=10	Students N=40
SEX			
Male	35%	20%	45%
Female	65%	80%	55%
AGE			
18-20	—	—	28%
21-25	—	30%	48%
26-30	—	—	11%
31-40	—	60%	11%
41-45	—	10%	2%
60-65	18%	—	—
66-70	59%	—	—
76-80	5%	—	—
80+	18%	—	—
MARITAL STATUS			
Single	24%	—	88%
Married	71%	100%	10%
Other	.05%	—	2%
EDUCATION			
Below High School	—	40%	—
High School	18%	30%	50%
College	—	—	45%
University	35%	10%	2.5%
Other	47%	20%	2.5%
INCOME			
<10,000	—	10%	28%
10-29,000	47%	50%	50%
30-50,000	41%	40%	5%
>50,000	12%	—	18%
DENTAL HYGIENE VISITS			
6 Months	18%	—	50%
1/Year	41%	30%	14%
<1/Year	6%	30%	21%
Emergency	—	—	2.5%
Never	35%	40%	2.5%
DENTIST VISITS			
6 Months	29%	—	50%
1/Year	47%	20%	13%
<1/Year	12%	60%	32%
Emergency	—	20%	2.5%
Never	12%	—	2.5%
METHOD OF PAYMENT			
Self	82%	70%	32%
Family	—	—	10%
Social Assistance	—	20%	—

only attending on an emergency basis. In terms of who pays for their own dental care the distribution is as follows: 70% of the low-income group, 82% of seniors, and 32% of college students. It is interesting to note that 82% of these seniors had some or all of their natural teeth.

Materials and Methods

The researchers were two University of British Columbia students enrolled in the Bachelor of Dental Science Dental Hygiene degree completion program, and second year dental hygiene students at Camosun College, working under the direction of a project manager.

The first step was to identify exactly what information would be sought. Use of an "information matrix" helped to guide and clarify what, why, and how the information would be used. Research goals and objectives were developed next, including a

timeline in which to achieve them. The research goals for these population groups were to:

1. Find out what influences enable or diminish the population group's ability to access dentistry.
2. Determine the most important aspects of a dental office visit, and what are the most difficult aspects, for the population group.
3. Identify the most effective ways to provide preventive dental health information.
4. Present these findings to the dental community.

Three populations of interest were selected — low income, well elderly, and college students. Unstructured or "conversational" tape-recorded interviews were the tool used to gather the data. Interview questions were developed appropriate for all population groups. These questions are shown in Table 2.

A cover letter, consent form, and face sheet for demographic data were developed for each group.

The University of British Columbia Ethics Review Board provided consultation. Confidentiality was protected by using code numbers and participation was purely voluntary. A consent form explaining the research process and how the information would be used was read and efforts were made to ensure that each participant understood the details prior to signing.

Table 2:
Data Gathering Instrument

PREAMBLE (To Place the Participants Into the Context of a Dental Office Visit)	
	"How do you feel about going to the dentist?"
	"Think about the last time you were at the dental office. Why did you go?"
	"How did you feel about it? Was it a good experience?"
	"How long have you been going to the same dentist? Why did you change/choose to stay?"
Question #1	When you think about your dental visits in the past, what, if anything, made it easy for you to go? Is there anything that makes it difficult for you to go to your dental office at this time?
Question #2	Most people have things that they really like about the dental office and things that they do not like. Tell me about your experiences.
Question #3	How do you take care of your teeth?
Question #4	Where did you learn about that? Other than taking care of your teeth, is there any other oral health information that you have heard recently? Where?
Question #5	Do you have any other comments?

Participants were contacted and a mutually convenient time and location was arranged for each interview. The interview process ranged from 15 to 90 minutes, depending on the population group and the individual participants. The actual interviews were conducted in a manner to facilitate a relaxed, open conversation. Some preamble questions were asked to place the participants into the context of a dental office visit. For instance, in Question One, asking "is transportation a concern?" would be an example of a probe. Probes were used as little as possible, and only used to initiate a response when restating and clarifying the question were not sufficient.

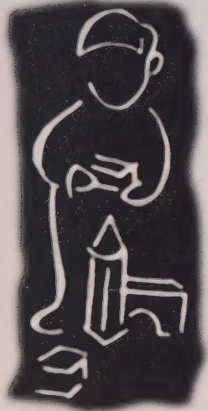
Each interview was transcribed. Key word analysis was used to track words and descriptions used by participants, and to look for patterns of responses. These were then grouped into broader categories for interpretation. Direct quotes from the interview were used to support the data. Quantitative data from the demographic fact sheet was tabulated for each group. Interpretation was done for each group based on frequency and trends of responses in each category, and then compared across all groups to determine differences and similarities. These findings are discussed below and illustrated in the graphs.

Discussion

To get an overall picture of the issues or topics that are important to the respondents, the interviewers used the "key word analysis technique". As discussed in the methods and materials section, key word analysis means going through the responses to each question and noting all the words or descriptions people used to talk about the same thing. For instance, in question one, when the participants were asked about their ability to access dentistry, many described flexible hours, convenient location, having the dental office confirm dental appointments, not having to wait to book an appointment and parental support as having a positive impact on their ability to access dental care. These repeated patterns of response all talk about the same thing — "convenience".

Question One: What makes it easy (difficult) for you to go to the dental office?

Nine categories were identified by looking for "key words" or repeated patterns of response. These categories included cost, past experiences, convenience, physical access, value placed on health, personal time shortage, urgent need, child care and problems finding a dentist. Cost, past experience, convenience and time shortage were mentioned most often as barriers to accessing dental care.



ENABLING FACTORS

- atmosphere
- empathetic staff
- valued service
- explanations/
reminders
- accessibility/
flexibility (hours)
- third party
insurance

ELDERLY

Convenience was by far the most common response to question one. The elderly described the dental office confirming appointments, not having to wait for bookings, flexible hours and location as some of the conveniences they appreciated. One participant said, "It is very convenient. If I need something done, I just make an appointment and go." Getting to the dental office did not seem to be a problem for this group of independent-living seniors residing in a small town. Cost was identified as the most difficult thing about going to the dentist. Comments such as, "the only real difficult part is that it is expensive and I have never had dental insurance" and "it's expensive because I am on a fixed income now" were common. From the demographics it was observed that the vast majority of this group visit the dentist annually and one half of them see a hygienist at this time. A couple of respondents identified previous bad experiences and poor physical access as factors that make it difficult to visit the dental office while two participants found it easy to access dental care because of the high value that they place on health.

LOW INCOME

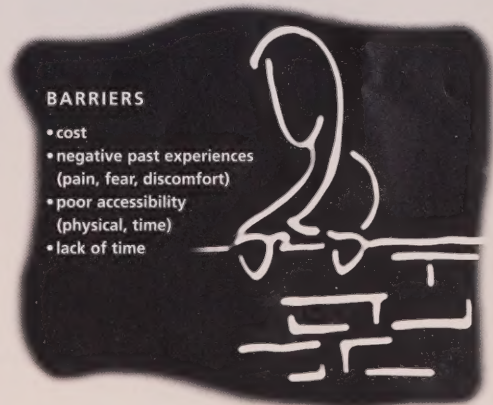
The greatest barrier for this group in accessing dentistry is cost. Comments such as, "I don't have dental coverage, so finances make it difficult for me to go. We are both looking for work, and hope to find jobs with dental plans" and "My major barrier is cost. It used to be fear, but not so much now. It would be easier if there was some kind of dental coverage closer to what we have as medical" are examples of this. The low-income group do not qualify for most social assistance programs, so they pay for dental care themselves, despite lower incomes and often several children. Those in this particular sample all had children in an urgent treatment program coordinated by the local health unit. Many of this group only went to the dental office in an emergency, and often sent their children first before attending to their own dental needs. One mother mentioned that, "I want the best for my kids, so I take them first, but only if they have a problem." Convenience is also important to this group. Flexible hours and location were mentioned as disabling factors when accessing dental care, due to child care, working schedules, and easy access within walking distance. One participant said, "Flexible hours would make it easier to go... Saturdays and evenings, due to working and the kids". Only 20% of those respondents mentioning convenience found accessing dental care convenient. In addition, the pain and fear associated with past experiences were negative influences. Despite the fact that lower income families do not attend the dental office regularly, most value their dental health and are genuinely discouraged about not having their teeth examined more often.

STUDENTS

The largest influences for this group on accessing dental care are cost, convenience, lack of time, and past experiences at the dental office. If students are under their parents' care, then it is easier for them to attend the dental office because their parents arrange and pay for their appointments. Comments such as "I have always been covered by my father's dental plan" are evidence of this. Of the students mentioning cost as a factor, 54% were under their parent's care and consequently did not find cost to be a barrier when accessing dental care. The remaining 46% without parental support found cost to be a definite obstacle. As time is a significant

factor for this group, due to classes and studying, other concerns such as inflexible hours (no evenings and weekends), location, lateness and inefficiency of the office were mentioned as barriers. One student said, "Nothing really makes it difficult to go, but now school interferes with the time." Getting reminder calls or cards was also helpful. One such comment was, "What made me go to the dentist is that they would send a card in the mail to say it's check-up time, and I could just go. I was on my parents' dental plan". Also, being out of town and going to school made it hard to attend regularly. A significant number responded that fear and pain were deterrents also. Of those respondents mentioning conveniences and past experiences as being factors when accessing dental care, about half found accessing dental care convenient while the other half did not. Likewise, about half of the respondents did not like to attend the dental office due to the pain and fear associated with past dental visits while the other half found a pleasant dental experience in the past to be an enabling factor when accessing dental care.

205



BARRIERS

- cost
- negative past experiences
(pain, fear, discomfort)
- poor accessibility
(physical, time)
- lack of time

Question Two: What do you like (dislike) about the dental office?

Five categories were identified by looking for repeated patterns of response. These categories included staff, comfort, atmosphere, explanations, and distractions.

ELDERLY

Most of the elderly identified the staff as what they liked the most about the dental office visit. They like a dentist and staff that is friendly, caring, and competent. Comments such as, "...competent staff, this is the most important thing" and "how

they deal with the public is the most important thing" as well as "I like it when they talk to you to see if you are okay. It kind of relaxes a person" and "The staff is genuinely interested in you. It isn't only a job" are evidence of this. Comfort and atmosphere were also referred to with the actual physical surroundings of the dental office mentioned most often. One participant said, "The office is nicely decorated, has nice pictures and is airy. I am affected by my surroundings". While most seniors liked their physical surroundings, one senior said, "Surroundings don't mean a thing because what's got to be done, has to be done, so you just go and do it." A number of the elderly appreciated having costs and treatments explained to them. Participants said, "I like it when the staff takes the time to do a few extra things like explain things to you and talk to you." In contrast to this statement, two participants said, "You should be able to get an estimate of the cost before they start. When you don't get an estimate you kind of feel locked in. It's embarrassing asking for one. You feel like a cheap-skate." and "The cost of cleaning seems to be more now. I think more knowledge should be given to the person so they know the reasons for having their teeth cleaned. I would like to see scientific proof that shows that cleaning should be done and how often it should be done, not just someone saying you need your teeth cleaned." Other seniors mentioned that they appreciated the dentist being on time and that safety regarding asepsis, cleanliness and an adequate medical history were important. Although many of the seniors remember painful dentistry from the past, they were much more willing to overlook some of the discomforts in the dental office than the younger groups interviewed.

LOW INCOME

For the low-income group, a caring and friendly staff were the most mentioned in this category. Many participants made comments such as, "If no caring there right at the front, it'll turn me off. I like a friendly feeling... if warmth not there, then I won't go in. In this office, I got a pleasant feeling as soon as I came through the door... they helped me right away... I didn't sit in a corner for an hour!" (direct quote). Comfort was also mentioned as important. While many participants felt uncomfortable in the dental office, one participant described

a positive experience, "...it's a better experience than it used to be due to better anaesthetic and pain control... don't have to spit out all the time... speeds it up... the dentist and assistant both in the mouth to get the work done... equipment doesn't look as intimidating and often do not see it at all... the most up-to-date offices. Friendly, understanding and professional staff." Explanations of costs, procedures, and alternate treatments were valued but often not obtained. One respondent mentioned that, "I wish there was an opportunity to ask questions without paying a lot of money. For instance, some lawyers give away one hour free consultation to discuss your case... I like that system... it gives the profession credibility. Information sharing is important to me — I am influenced by facts and information. If dentists have not explained things to me, I have not gone back." This group appreciated provided distractions such as walkmans, music, television, and enjoyed the prizes. Atmosphere and efficiency were also noted as important attributes of a dental office visit. The sound of the drill, smells, anaesthetic (needle) and fluoride treatment were the main dislikes and mentioned often. This is suggested by comments such as, "I don't like hearing the drill. I hate the freezing — the feeling of being swollen, tingly, fat... getting it hurts, especially in the front, but the dentist talks to me, is cheerful, and tells me what he is going to do." Several people in this group mentioned that how their children were treated at the dental office was extremely important. Comfort, atmosphere, and distractions that focus on children were considered essential. As parents, they felt very responsible for the quality of experience that their children had at the dental office. Many had had unfavourable experiences with dental office visits with their children, which made it difficult to return there. Some were told that "things were okay" with their children's teeth, when they could tell themselves that this was not the case, due to brown spots and such.

STUDENTS

The student group thought that the staff was the most important part of the dental office visit but disliked any discomforts associated with dental treatment. Discomfort came from pain during treatment, the anaesthetic procedure, and the sounds and smells of the dental office. Comments such as "I dislike anticipating the dental

appointment and the fear of the needle... also, I dislike the smell of the dental office and the sound of the drill" and "my one big fear is injections" were very common. Many students also disliked the fluoride treatment saying, "They've got to do something about that disgusting fluoride they stuff in your mouth" and "I don't like the fluoride trays; they mean pain and discomfort." Most of the students liked a friendly staff and many mentioned that they like their dentist. Students said, "The staff were all really friendly, really interested in you as a person, so... that makes you more keen on going, with pleasant people around you instead of grumpy ones that don't really care" and "the staff is probably the nicest part of it." The dental office atmosphere, explanations and time management in the dental office were also important to this group. Wanting to feel part of the treatment and to know what is going on were important to the student group but about half of the participants identifying explanations as being important did feel that the treatment and costs were sufficiently explained. This is suggested by statements such as, "I feel that communication is a critical factor in determining whether the experience in the office is pleasant or unpleasant. I feel that being listened to and given choices in regard to treatment are important." and "It's better to know what's going on. My new dentist shows me with a mirror... it makes me feel better." In reference to time management in the dental office, most responses suggested a dislike for waiting. Comments such as, "I really don't like it when they overbook the doctor and leave you waiting around. We all have work to do." and "It makes me feel like they don't care about me (left waiting)" suggest this. Some of the students appreciated distractions such as posters, mobiles, music (walkmans) and televisions and a few mentioned that a clean office was important.

Question Three: How do you take care of your teeth?

The responses to question three are displayed in Table 3.

Although the responses to this question are interesting, Question Three served mainly as an introduction to the information needed for the fourth question.

Table 3:
Home care practices

	Percentage of Population Group		
	Elderly	Low Income	Students
Toothbrush	100%	100%	100%
Floss	53	80	80
Other Aids	6	30	13
Mouthwash	12	20	10
Chew Gum	0	10	5

Question Four: Where do you get (like to get) your preventative dental health information?

The five categories identified by looking for repeated patterns of response were the dental profession, family, media, school, and friends.

Figure 3 identifies the proportion of responses for each population group in response to Question Four.

ELDERLY

Most of the respondents receive their oral health information from the dental profession in a private practice setting. A few obtained information from magazines, TV, family and friends. One individual mentioned that, "There are so many experts. One says one way and another says another... I just use the method that makes the most sense to me". As well as homecare techniques, some of the seniors mentioned learning other oral health information from these sources. Individual statements included the importance of regular checkups to monitor for oral cancer, the fact that bacteria in the mouth can cause bad breath, the possible risks of TMJ surgery, the effect of poor oral health on general health, and the oral benefits of having a balanced diet.

LOW INCOME

Most of the dental information for this group is learned from the dental profession, family and school programs. Brushing was mainly learned at home, whereas flossing was learned from the dental profession. The media (TV and pamphlets) were also influences. This group reported getting information from local health units (dental division), health societies such as the Arthritis Society which supports people with devices to help grip their toothbrushes, and sports associations which discussed mouth protection.

STUDENTS

Again, most dental information is received from the dental profession and the family. One respondent stated that, "Unless you go to the dentist regularly, there is not really any information out there. There are no ads for dental care on the TV, just tooth paste ads." School programs were the next most influential source. One subject remembers the dental hygienist coming around to the school and reminding the students how to brush their teeth. The media was also a major influence with television mentioned most often, followed by magazines, then pamphlets. Although this group has little time for TV and reading, and may be skeptical about what they see or read, the media appears to have some influence. Overall, they state that they would rather learn from dental professionals — people with credibility — rather than other sources. The type of information gleaned from TV seems to be mostly about products, such as toothpastes, mouthwashes, and tooth brushes. From magazines, there is more controversial information such as the hazards of amalgam fillings and fluoride. Some of the college students are learning something about nutrition through their courses.

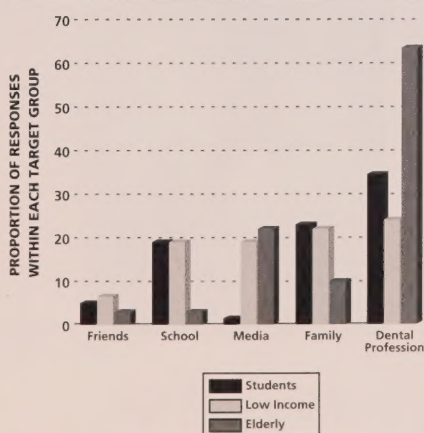


Figure 3

Question Five: Do you have any other comments?

ELDERLY

When asked if they had any other comments, five individuals said that dentistry had "come a long way over the years". It was "much less painful, much more preventive and the quality was very high". Four individuals also reiterated that dental care cost too much. One individual said, "In general we have made costs and overhead so high for all businesses. This causes things to cost so much". A couple of seniors thought that dental mechanics should be licensed to make partial dentures because "they made better dentures than dentists". Individual statements were made suggesting that dentistry should police the competency of its profession and that dentists should have mobile clinics for seniors that cannot access dental care.

LOW INCOME

Most of the comments from the low-income group referred to the cost of dental care. Comments such as "Cost is number one. I think we should have a dental plan like our medical, for everybody — not just people who have good jobs, but 100% 'cause low-income have to pay more and pay for everything" and "I still don't understand why your mouth is not covered by medical. Of course premiums would be higher, but that's okay. Why are vaccinations covered and not dental care for kids? Why is the 'under three years free dental visit' not better known?" suggest that this group believes that dental care should be part of medical care. Other comments questioned the recall interval. For example, one respondent said, "If I have a broken

leg, then I need to see a doctor every couple of weeks; if I have gum disease, then I need to go every few months to see a dentist; but if my mouth is healthy, why do I have to go every six months?"

STUDENTS

Like the low-income group, the students thought dentistry was too costly and that dental care should be part of the medical care plan. One student suggested, "I'd like to see it cheaper, maybe a dental plan through BC Medical that was a lot cheaper. That would help everyone out... people would go a lot more". Some of the students recognized the

importance of self-care with statements like, "It's not what you (the dental profession) do... I think it's what we can do. I think that if everybody brushes and stuff, then they are not going to have to go in and get drilled, and that's the reason why they go in there, and don't like going there." The comment "I think that there should be more places to go for dental care, where you don't necessarily have to see a dentist, where you can see a hygienist. You can get your teeth cleaned if that's all you want" suggests that some of the students question access to various forms of dental care.

Conclusion

1. Continue to provide comfortable, caring, convenient and friendly dental care.
2. Listen to clients and provide informed consent complete with explanations of risks, benefits, and alternative treatments.
3. Accept that the responsibility for providing dental health education lies mainly with dental professionals in the private practice setting, and that there is a need to broaden the base of teaching to include aspects of self-care beyond brushing and flossing. Oral cancer screening and self-examination, nutritional counselling, tobacco cessation counselling, mouth protection and special needs must be addressed.
4. Reach out to those in the population who are not accessing our care and assist them in overcoming the barriers of fear, lack of time, child care, and, above all, cost.

5. Place ourselves in the community to be more accessible and provide information to people who need education on dental health promotion and prevention.

Our investigation has identified the issues important to the "three populations of interest" in this research project. The next step is to form focus groups to discuss planning initiatives to help them solve the issues identified. Through focus group discussion, dental hygienists can facilitate the planning and implementation of proposals to achieve this and help evaluate the results of these efforts.

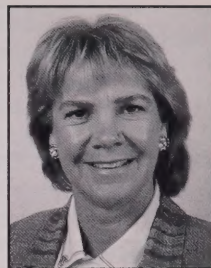
Acknowledgement:

We would like to thank the "Class of 1995" Dental Hygiene students of Camosun College for their participation in interviewing and transcribing responses from the college student population. We would especially like to thank Mary Ann Hayes, Executive Director of the British Columbia Dental Hygienists' Association for acting as Project Manager and Shirley Bassett for her support in editing and mentoring.

References

- ¹ "Report on Dental Health in Canada" from *Canada's Health Promotion Survey 1990 Technical Report (HPS90)*, Health and Welfare Canada, 1993; *Probe*, 1993; 27(6): 215-222.
- ² *Health Status and Needs Survey: Summary Report 1995*. Regina Health District.
- ³ *Institutes of Medicine: The future of public health: Committee for the study of the future of public health*. Washington, D.C., Division of Health Care Services, National Academy Press, 1988.
- ⁴ Nettleton, S., "Understanding dental health beliefs: An introduction to ethnography". *Community Dental Health*, 1986; August: 145-146.
- ⁵ *Closer to Home: The Report of the British Columbia Royal Commission on Health Care and Costs*, 1991.
- ⁶ *Health Promotion — a Discussion Document on the Concept and Principles*. WHO Regional Office for Europe, Copenhagen, 1984.
- ⁷ Epp, J., *Achieving Health for All: A framework for health promotion*. National Health and Welfare Canada, Ottawa, Canada, 1986.
- ⁸ Barnsley, J. and Ellis, D., *Research for change: Participatory action research for community groups*. The Women's Research Centre, Vancouver, B.C. Canada, 1992.
- ⁹ Abbot, K., Blair, F., and Duncan, S., "Participatory research". *The Canadian Nurse*, 1993; 89(1): 25-27.

Barbara Drewry graduated with a Diploma in Dental Hygiene from the University of British Columbia in 1972. Her clinical dental hygiene career includes both



general and specialty (Periodontics) practice. Barb joined the Camosun College Faculty in 1990, teaching second year clinical dental hygiene, practice management, radiography, dental materials and periodontics. She is currently on leave while completing a Bachelor of Dental Science at UBC. An active member of CDHA since graduation, Barb is a past president of BCDHA and the Victoria component society, a former CDHA director and a member of the American Association of Dental Schools (AADS).

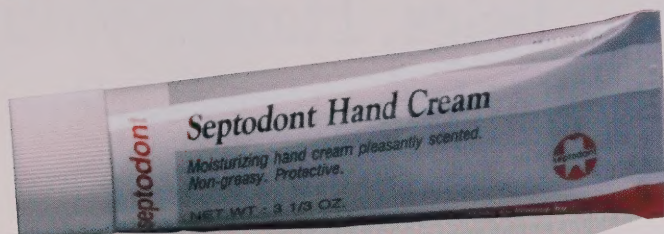
Rita Chu graduated with a Diploma in Dental Hygiene from the University of British Columbia in 1975. She worked in Vancouver for a year in



private practice, in a periodontics practice and with UBC's orthodontics department before moving to Salmon Arm, BC where she worked in private practice for 19 years. She currently works in private practice part-time and is enrolled in UBC's dental hygiene degree completion program. She is the mother of two and enjoys family activities including cycling and hiking.



You Love ur Hand Cream!



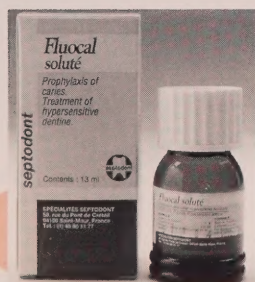
We know you will like these
Septodont products, too!



Kit Parcan

Periodontal Pocket Irrigational Kit

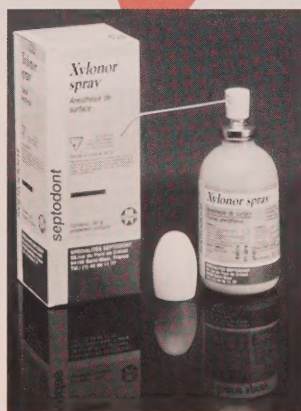
Kit Parcan allows you to easily irrigate periodontal pockets. The Parcan needle is designed with a terminal and a lateral opening to help ensure that the injected solution does not block. Each kit contains one 10 ml syringe and 10 needles. Refill needles are also available.



Fluocal Solution

Sodium Fluoride Solution

Fluocal is a sodium fluoride solution formulated to help treat dental hypersensitivity and reduce the incidence of dental caries. Fluocal's liquid formula allows easy application, and it will not cause staining.



Xylonor Spray

Topical Anesthetic Spray

Xylonor is a lidocaine amide based anesthetic spray which can be used in a variety of procedures such as before injections, lancing of abscesses, scaling, extraction of mobile deciduous or permanent teeth. Xylonor's mint flavor is pleasant for patients, and its pre-dosed spray is convenient for dispensing. In order to help prevent cross infection, the applicator tip can be autoclaved between patients. Additional tips are available upon request.



Septodont of Canada, Inc.

1-800-647-0643



Snakes. Twigs. Hair. Nylon. Motors. What's next?

The North American Indians believed that running a green snake across their teeth seven times would keep them sound for life.

Oil of ant, dried vipers and the brains of a hare have also been used throughout history to promote cleaner, healthier teeth. Of course, none of them worked. They didn't taste like much, either.

The first real advancement in oral hygiene was over 2,000 years ago. An Arab pulled a twig off the *Salvadora persica* tree, rubbed it against his teeth, and the toothbrush was born.

The toothbrush as we know it today wasn't invented until almost

1,500 years later. It took another 500 years before the hair brush was replaced by the nylon brush we



use
today.

And the electric toothbrush, the last real advancement in oral hygiene, has been around for over 100 years.



So what's
next? The SenSonic™
Plaque Removal Instrument.

From Teledyne Water Pik.

Sonic technology is the
first breakthrough in oral hygiene
since the electric toothbrush. The
SenSonic delivers 30,000 brush strokes
a minute. That's five times faster than
electric, and 100 times faster than
manual. It effectively removes plaque
and reduces stains. And it stimulates

toothpaste into a penetrating foam
that cleans hard to reach places.

And with a lateral motion of $\pm 10^\circ$,
a compact brush head
and contoured
bristles, it's gentle
on gingival tissue
and enamel.

The SenSonic. Five
times faster than electric.
One million times
better than snakes.

For additional
information, call
1-800-268-9656.



The SenSonic™ Plaque Removal Instrument is accepted
as an effective cleansing device for use as a part of a
program for good oral hygiene to supplement the regular
professional care required for oral health.
Council on Scientific Affairs, American Dental Association

SENSONIC
PLAQUE REMOVAL INSTRUMENT

 **TELEDYNE WATER PIK**

by Nancy Neish, BA, Dip DH, MEd and Brenda Fortune, Dip DH

Verifying the Relevancy of CDHA's Code of Ethics

The following paper was presented as a Poster Session at the American Association of Dental Schools 72nd Annual Session, held in San Antonio, Texas in March 1995. Both Nancy and Brenda are dental hygiene instructors at Dalhousie University and contribute regularly to Probe.

Abstract

Codes of ethics are written by experts in the field of ethics in conjunction with members of the profession to whom the code applies. Professional codes place the welfare of the patient/client (i.e. members of society) before the welfare of the profession.

In June 1992, a revised code of ethics was adopted by the Canadian Dental Hygienists Association (CDHA). A study was conducted at the Dalhousie University Dental Clinic to help determine if the principles, values and standards in this code met the expectations of clients seeking dental care

As an ethics assignment, third year dental and second year dental hygiene students interviewed 10 of their clinic clients by asking, "What do you think my ethical responsibilities are to you?" During the 1992/93 academic year, a total of 704 client responses were received; 779 responses were received during the 1993/94 academic year and an additional 311 responses were received (from dental hygiene students only) in the 1994/95 academic year. All responses received were collected, analyzed and categorized.

The majority of responses fell under the categories of veracity, informed consent, beneficence and quality assurance. An analysis of the responses identified common concerns with each ethical principle.

The CDHA Code of Ethics met the concerns of the dental and dental hygiene students' clients interviewed. Replication of this study in other regions of Canada would be useful to further establish if the code meets society's expectations.

Expectations of the Community: Code of Ethics

WHAT IS A PROFESSION?

Four common requirements of professions are:

- 1) A distinct body of knowledge generally requiring education beyond the usual level.
- 2) A component of service to society.
- 3) The right and responsibility to be self-governing.
- 4) A Code of Ethics.

Society has conferred upon the professions a special status with unique rights and privileges. Professions, such as dentistry, determine their own standards of licensure and control entry to the profession, the length and conditions of education, the distribution of services, and to a great extent, the cost of services.

The interaction between the profession and the community at large gives professions the right to self-determination. Societies require people with specialized expertise to help them secure certain values, needs and wants such as the absence of pain and appropriate oral functioning; therefore, societies establish and support professions.

It is society's belief that professionals place the welfare of the patient/client above their own welfare. This helps to support the independence of the professions in a regulated society. If society is to continue to give special privileges to professionals, professionals are, in turn, required to practice in an ethical manner.

Expectations of the Community: Methodology

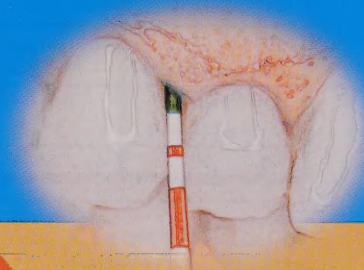
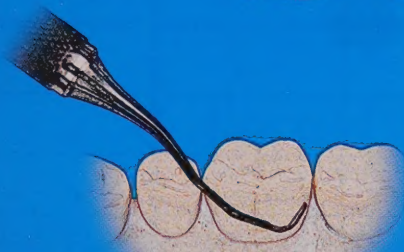
It is critical when developing a Code of Ethics to consult "the community" to determine issues that are considered to be important to the clients served.

To determine whether the CDHA Code of Ethics achieved this goal, third year dental students and second year dental hygiene students were asked to interview 10 of their clinical clients by asking the following questions:

"What do you think my ethical responsibilities are to you?" If clients did not understand the question as stated, students rephrased it by asking, "What do you think my professional responsibilities are to you?" or "How do you wish to be treated by me?"

Client responses received over the past three years were collected and categorized. There were a total of 1,794 responses from clients attending the Dalhousie University Dental Clinic. This facility treats individuals of all ages, from a variety of socio-economic backgrounds, including people with special needs and complicated medical histories.  Continued on page 214

Designed for your Use.



FREE
PerioWise®

When you purchase 6
Scalers and Curettes

PREMIER® SCALERS AND CURETTES

Premier Scalers and Curettes are made of surgical grade stainless steel for long life and repeated sterilizations.

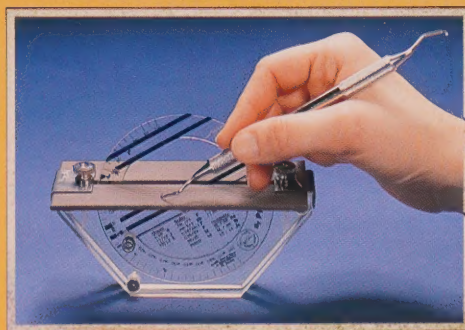
PREMIER® PERIOWISE®

Patented, multi-colored periodontal probes. Extremely easy to read, gentle to tissue and safe around implants. Can be repeatedly autoclaved.



DISC™ INSTRUMENT SHARPENING SYSTEM

Premier DISC™ is easy to use, enabling hygienists to quickly sharpen scalers and curettes correctly - without damaging the cutting surface.



*PerioWise Probe: Return a copy of an authorized dealer invoice indicating purchase of 6 Premier Brand Scalers and Curettes between 9/1/95 and 12/31/95. May not be combined with other offers.

Mail to: Premier Dental (Canada), Inc., 480 Hood Rd., Unit #3, Markham, Ontario L3R 9Z3 / © PerioWise is a registered trademark of Premier Dental Products Company. /™ DISC is a trademark of Steve B. Moore/Patent Pending.

	RESPONSES				
	1992/93		1993/94		1994/95
	DH2	DDS3	DH2	DDS3	DH2
	N = 374	N = 330	N = 406	N = 373	N = 311
Respect for Persons	6.41%	6.06%	10.83%	17.90%	22.5%
Confidentiality	5.34%	5.45%	7.14%	1.07%	5.14%
Veracity and Informed Consent	34.22%	46.36%	23.15%	34.85%	6.43%
Beneficence and Quality Assurance	51.60%	39.09%	57.38%	44.77%	64%
Justice	2.40%	3.03%	1.47%	1.34%	1.92%

Major Themes

RESPECT FOR PERSONS:

Clients' responses reflected the following concerns:

"Treat me as if I were your sister/mother."

"Treat me with respect."

"Treat me as a person, not just a 'mouth'. I want a personal touch."

"I expect my dentist to be on time and not running late all the time because I hate waiting nervously for two hours reading old magazines."

CONFIDENTIALITY:

"Don't talk about me and my personal problems with anyone." (i.e. respect confidentiality.)

INFORMED CONSENT:

"I want you to give me all the facts so that I can be a part of the decision-making process."

VERACITY:

"Tell me the truth about my mouth — tell me everything, the true condition — lumps, bumps, pockets, areas needing hygiene attention. I want to be informed in truthful terms."

"Don't rip me off. Don't overcharge. Don't do things just for the money. I want to know all the treatment options and not just the expensive ones."

BENEFICENCE & QUALITY ASSURANCE:

"I want good quality work with no pain."

"Watch the infection control. I want protection from transmitted infections."

"Do the best you can. Only do what is necessary. Have a clean, neat professional appearance."

JUSTICE:

"If you can't handle it send me to someone who can."

"Only do what you are capable of doing."

There were a few responses that defied categorization.

Discussion

The majority of responses received by both dental and dental hygiene students fell under the categories of veracity and informed consent and beneficence and quality assurance. There were more concerns expressed concerning financial issues in the dental students' responses.

Results

The responses collected addressed the principles noted in the table above.

Summary

The CDHA Code of Ethics was written by people with an expertise in dental ethics. It was reassuring to find out that the revised Code of Ethics does in fact cover the concerns of the community surveyed. Communities in other areas of the country should be surveyed to investigate whether the Code of Ethics meets their expectations. Similar studies could be conducted in dental/dental hygiene schools across Canada.

References

Code of Ethics for Nursing, Canadian Nurses Association, February 1988.

Code of Ethics for Nursing, Canadian Nurses Association, November 1991.

Report of the CFDE/CDA Conference on Ethics in Canadian Dentistry and Dental Education, September 1989.

Clinical Practice Standards for Dental Hygienists in Canada, Report of the Working Group on the Practice of Dental Hygiene, 1988.

CDHA Code of Ethics, June 1992.



Nancy Neish,
BA, Dip DH, MEd



Brenda Fortune,
Dip DH

PerioREPORTS

Bimonthly publication which summarizes periodontal research of specific interest to clinicians. Easy to read format keeps you up to date on the latest research findings. Journals reviewed for **Perlo REPORTS** include:

Journal of Periodontology
Journal of Clinical Periodontology
Journal of Periodontal Research
Journal of Dental Research
Periodontal Abstracts
Quintessence International
J of Periodontics and Restorative Dent
JADA, JADHA
and many more

☐ Please send sample issue for my review

☐ \$48 one-year
☐ \$84 two-year

Name

Address

City

Prov Postal Code

Mail to: Perio REPORTS
Box 52090, 311 - 16th Ave. NE
Calgary, Alberta, T2E 8K9

SELF-ASSESSMENT TEST

Thanks to Algonquin College dental hygiene graduate (1995) Marie Papadopoulos and Algonquin College Dental Hygiene instructors, Catherine Thom and Brenda Leggett for working collaboratively to produce this issue's Self-Assessment Test.

Carpal Tunnel Syndrome

215

1. Which of the following lists of activities best represent occupational hazards for the dental hygienist which could result in carpal tunnel syndrome (CTS)?
 - a. Repetitive action, scaling force required and operator posture.
 - b. Client positioning, instrument selection and length of work day.
 - c. Instrument grasp and adaptation, type of working stroke.
 - d. Instrument selection, direction of stroke and wrist motion.
2. Which statement best reflects the incidence of carpal tunnel syndrome?
 - a. It occurs three times more frequently in women.
 - b. Small middle-aged men are the most often affected.
 - c. It occurs most often in people with slender wrists.
 - d. It occurs in men and women with equal frequency.
3. Which of the following lists of symptoms most accurately describes CTS?
 - a. Swelling of the thumb and index finger.
 - b. Muscle spasms in the wrist and forearm.
 - c. Blanching of the distal phalanges.
 - d. Morning stiffness and numbness of the hand.
4. Compression of which one of the following nerves causes the symptoms of CTS?
 - a. The palmar nerve.
 - b. The ulnar nerve.
 - c. The median nerve.
 - d. The musculocutaneous nerve.
5. When were the symptoms of CTS first recognized?
 - a. 1795.
 - b. 1830.
 - c. 1865.
 - d. 1942.
6. In the early days, carpal tunnel syndrome was referred to as a "cramp". With which occupation was it first associated?
 - a. Farmers.
 - b. Telegraph operators.
 - c. Telephone operators.
 - d. Writers.
7. Exercise will help prevent CTS because strong, stretched and warmed-up hand muscles do not fatigue as easily when scaling.
 - a. The statement is true and the reason is true.
 - b. The statement is true and the reason is false.
 - c. The statement is false and the reason is false.
 - d. The statement is false but the reason is true.
8. Which of the following recommendations would be useful for reducing the incidence of CTS among dental hygienists?
 - a. Wash hands in cold water.
 - b. Avoid frequent changes of operator position.
 - c. Avoid using indirect vision.
 - d. Wear correctly fitting gloves.
9. What treatment is indicated when the signs and symptoms of CTS are persistent and progressive?
 - a. Use of anti-inflammatory medications.
 - b. Wearing of wrist splints in the daytime.
 - c. Incision of the transverse carpal ligament.
 - d. Hand exercises and paraffin baths.
10. Which of the following best describes the estimated incidence of CTS among practicing dental hygienists?
 - a. Less than one percent.
 - b. 3-5 percent.
 - c. 10-15 percent.
 - d. Incidence unknown.
11. Which one of the following tests is used to diagnose CTS?
 - a. Babinski's reflex.
 - b. Urea clearance.
 - c. Phelan's sign.
 - d. Glucose tolerance.

Answer Key: 1. a, 2. a, 3. d, 4. c, 5. b, 6. d, 7. a, 8. d, 9. c, 10. d, 11. c

CONTINUING EDUCATION CALENDAR

NOVEMBER

- 23-25** **13TH INTERNATIONAL IFDH SYMPOSIUM**
International Federation of Dental Hygienists
 Tokyo, Japan(800) 267-5235
- 24** **IMPLANT MAINTENANCE**
Vassous Implant Centre
 Edmonton, AB(403) 488-1240
- 25** **ORAL CANCER AND HIV DISEASE: EARLY DETECTION, CONTROL AND MANAGEMENT**
The Use of Lasers in Dentistry and Dental Hygiene
 JoAnn Gurenlian, RDH, PhD
University of British Columbia, Dental Hygiene Degree Program, Continuing Dental Education
 Vancouver, BC(604) 822-2626
- 25** **ALTERNATIVE APPROACH TO PERIO THERAPY**
Vancouver Community College
 Vancouver, BC(604) 874-9923
- 25** **ORTHODONTIC MANAGEMENT OF THE MIXED DENTITION**
University of Alberta, Faculty of Dentistry
 Calgary, AB(403) 492-5023
- 26-29** **CURRENT ADVANCES IN DENTISTRY A 28-credit, four-day academic course for dental hygienists, including: Oral Radiology, Clinical Oral Pathology, Oro-Facial Pain, Pharmacotherapeutics**
Canadian Center for Continuing Dental Education Inc.
 Westin Harbour Castle Hotel
 Toronto, ON(800) 494-5536
- 30** **EATING DISORDERS AND DENTISTRY**
Vancouver Community College
 Vancouver, BC(604) 874-9923
- 2** **THE ALPA OMEGA MEMORIAL LECTURE: ORAL MANIFESTATIONS OF INFECTIOUS DISEASES**
 Sol Silverman Jr., DDS, MA
University of Manitoba, Continuing Dental Education
 Winnipeg, MB(204) 789-3331
- 2** **BACK, NECK AND SHOULDER PAIN — STOP IT!**
University of British Columbia, Continuing Dental Education
 Vancouver, BC(604) 822-2626

DECEMBER

JANUARY

- 5** **MEDICAL MANAGEMENT OF PATHOGENS**
Vancouver Community College
 Vancouver, BC(604) 874-9923
- 12-13** **ASSESSMENT AND MANAGEMENT OF MEDICAL EMERGENCIES/ORAL SURGERY SOLUTIONS TO HELP THE CLINICIAN SOLVE COMMON CLINICAL PROBLEMS FOR THE DENTAL PATIENT**
 Dr. Archie Morrison, Dr. Reginald Goodday
Dalhousie University Faculty of Dentistry
 Halifax, NS(902) 494-1674
- 13** **CPR FOR DENTAL PROFESSIONALS**
 Ron Boyar, DMD, MSc, Janice Wood, Dip DH
University of Manitoba, Faculty of Dentistry
 Winnipeg, MB(204) 789-3331
- 18** **EARLY TREATMENT WITH AN EMPHASIS ON FACIAL AND DENTAL ANALYSIS**
 Dr. Jack Dale
Ontario Dental Hygiene Orthodontic Study Club
 Mississauga, ON(416) 488-5134
- 15** **SELF-EMPLOYMENT AND THE DENTAL HYGIENIST**
 Harry Black, CMA
Manitoba Dental Hygienists Assn/ University of Manitoba
 Winnipeg, MB(204) 789-3331
- 24** **HEAD AND NECK CANCER: AN APPROACH TO MANAGEMENT**
University of Manitoba, Continuing Dental Education
 Winnipeg, MB(204) 789-3331

FEBRUARY

CONTINUING EDUCATION BY VIDEO CASSETTE VIA UBC

48 Clinical Topics are now available (5 new programs) in VHS format for independent study and continuing education credit. A detailed brochure, including program summaries and an order form, is available upon request from:

Continuing Dental Education, UBC
 #105-2194 Health Sciences Mall
 Vancouver, BC V6T 1Z3

or call (604) 822-9715



CANADIAN CENTER FOR CONTINUING DENTAL EDUCATION

Presents

CURRENT ADVANCES IN DENTISTRY

WINTER COURSES

A 28 credit hour academic course to fulfill the TOTAL YEARLY Continuing Education requirement for dentists and allied personnel in a FOUR DAY comprehensive course.

Two different courses being held in Vancouver and Toronto.

SATURDAY, FEBRUARY 17 — TUESDAY, FEBRUARY 20, 1996
The Westin Bayshore Hotel, Vancouver, British Columbia, Canada

Faculty and Course Agenda:

Faculty members are from across Canada

Dr. M.J. Pharoah
Oral Radiology

- New Imaging Modalities
- Principles of Radiographic Interpretation applied to common diagnostic problems

Dr. J.G. Lovas
Clinical Oral Pathology

- Clinical Features and Diagnostic Procedure to Differentiate Common Reactive Nodules, Red and White Plaques from clinically Important Lesions
- Clinical Features and Diagnostic Procedures to Differentiate Common Reactive Ulcers and Pigmented Lesions from Clinically Important Lesions

Dr. D. Haas
Pharmacotherapeutics

- Pain Control: Analgesics, Local Anaesthetics and their Vasoconstrictors
- Drugs for Conscious Sedation and Drugs for Treatment of Oro-facial Infections

Dr. S.I. Ahing
Oro-Facial Pain

- A Review of TMJ Anatomy, Physiology, Classification of TM Disorders and Neurobiology of pain will precede a case-based presentation on muscle and disk disorders
- A case-based presentation on arthritides and TMD-like maxillofacial syndromes

SATURDAY, MARCH 23 — TUESDAY, MARCH 26, 1996
The Westin Harbour Castle Hotel, Toronto, Ontario, Canada

Faculty and Course Agenda:

Faculty members are from Canada and the United States

Dr. E.J. Hannigan
Periodontics

- Dental Team Evaluation and Screening for Periodontal Disease
- Options in Periodontal Plastic Surgery to Enhance Esthetics and Health in Restorative Dentistry

Dr. T. Larder
Endodontics

- Diagnosis — Cleaning/Shaping — Obturation of the Root Canal Systems
- Restoration of Endodontically Treated Tooth

Dr. P. Cyr
Oral Surgery

- Mandibular Anesthesia — The "Hot Tooth"
- A practical approach to assessing the difficulties encountered with regional analgesia of the mandible

Dr. P. Cammarata
Prosthodontics

- Restoration of endodontically treated tooth
- Fundamentals of fixed prosthodontics
- A comprehensive review of current crown and bridge techniques

Tuition per course:

	<i>Any One Day</i>	<i>Any Two Day</i>	<i>Four Days</i>
Dentist:	\$225.00	\$425.00	\$695.00
Allied Personnel:	\$115.00	\$200.00	\$375.00

Continental breakfast, full lunch and coffee breaks are included each day in tuition cost.

Accreditation: This program is eligible for Category I credit hours.
SEVEN CONTINUING EDUCATION HOURS will be awarded for **EACH DAY**.

To Request Information • Brochure • Hotel Accommodations Contact: Janet Dawson
CCCDE • 125A-1030 Denman St., Vancouver, B.C. Canada V4G 2M6 • Tel: 1-800-494-5536 • Fax 1-800-494-5536

BIBLIOGRAPHIES

prepared by Carol Barr Overholt, Dip DH

ARTICLE:

Effect of a Pre-brushing Rinse on Dental Plaque Removal

Author(s): J. Vouros, D. Sakellari and A. Konstantinidis
University of Thessaloniki, Greece

Journal: *Journal of Clinical Periodontology*, 1994; 21: 701-704

Pre-brushing rinses have been investigated in recent years. The elements of these solutions appear to ease the bond between plaque and tooth surface.

Plax® (Pfizer Inc.) has been clinically evaluated with contradictory results. This article postulates that the varying research methodologies may have contributed to contrary results. The authors report that their own previous study, using photographic equipment and planimetric analysis of plaque, indicated no significant benefit was evidenced by individuals using Plax® versus a placebo.

This article represents a recent study of the effectiveness of the newly formulated Plax® solution containing detergents, Triclosan 0.03%, copolymer, and sodium fluoride 0.025%.

The study group represented 19 dental students with 24 or greater natural teeth and no serious dental problems; they had refrained from using any mouthrinse products during the previous six months.

Using a double-blind research design over two experimental periods, with a one week wash-out period, the students received a thorough scaling and coronal polish followed by a three week healing period. During this period the study group used no methods of mechanical or chemical plaque control, allowing the formation of sufficient dental plaque disclosed by 4% erythrosine solution.

Using a stringent technique, the four mandibular incisors were photographed. During the first experimental period the students rinsed for 30 seconds with solution I and were then instructed to brush their teeth for 60 seconds with a soft nylon brush. The mandibular incisors were then photographed again. The same format was followed for the second experimental period using solution II.

The efficacy of the solutions was based upon comparing the plaque removal during the two experimental periods. The results supported similar findings in previous studies. The pre-brushing solution Plax®, when compared to a control solution, offered no significant benefit in controlling the plaque on the experimental teeth.

The authors comment that the use of Triclosan (as an antibacterial) and fluoride (as an anticariogenic agent) may benefit clients as part of a routine oral hygiene program; they encourage further investigation of the product as a post-toothbrushing agent.

ARTICLE:

Effect of Evaluation of Two At-Home Bleaching Systems

Author(s): B. Godder DDS, J.M. Kaim DDS, W. Scherer, DDS,
I. Bruck BS, M.B. Hertz BS

Journal: *The Journal of Clinical Dentistry*, Vol. V, N° 3

A 1990 survey of ten thousand dentists indicates that 66% have used at-home bleaching systems. Because of the growing acceptance of bleaching vital teeth, the New York University College of Dentistry introduced the procedure into the core curriculum of the third year dental students.

The purpose of this study was two-fold; to allow the dental students an opportunity to expand their knowledge and proficiency in the area of home-bleaching techniques and to compare two available at-home bleaching solutions. The products represented in the experiment were Colgate Platinum Professional Toothwhitening System (Colgate Palmolive Company, New York NY) and Rembrandt Gel Plus (DenMat Corporation, Santa Maria CA). Both systems contain 10% carbamide or urea peroxide as the active ingredient. These chemicals interact with moisture to release free oxygen radicals, removing intrinsic and extrinsic enamel stains and producing a "whitening" effect.

In this double blind study, fifty dental students were divided into two groups. They received a complete prophylaxis two weeks prior to the initiation of the experiment. Three evaluators determined baseline tooth shades of four test maxillary anterior teeth and four control mandibular anterior teeth, using Trubyte Bioform Color Ordered Shades. After instruction in the proper application and wearing, custom-fitted mouthguards containing the bleaching solutions were worn twice daily (morning and evening) for one hour, for a period of two weeks, following the manufacturer's instructions.

Photographs (35mm) of the teeth were taken at baseline and at the evaluation periods of one and two weeks. Periodontal evaluations (Silness and Loe Gingival Index) were also performed at these times.

No clients experienced significant gingival inflammation. Three clients from each group reported mild tooth sensitivity which dissipated within one week of cessation of the use of the bleaching solutions. Both experimental groups exhibited teeth that were nearly two shades lighter by the first week evaluation and three shades lighter by the second week. Both products exhibited similar effects.

FACULTY OF DENTISTRY

Graduate Study in Dental Science

The University of British Columbia

The Department of Clinical Dental Sciences in the Faculty of Dentistry offers a graduate program leading to a Master of Science degree. This program is open to Dental Hygienists holding a Bachelor's degree. (The Bachelor's degree does not have to be in dental hygiene).

The program usually requires two academic years to complete and consists of didactic courses and original research.

Closing date for receipt of fully documented applications is **March 31, 1996 for admission in September.**

Further information and application forms may be obtained from:



The Graduate Advisor
Department of Clinical Dental Sciences
Faculty of Dentistry
University of British Columbia
2199 Wesbrook Mall
Vancouver, B.C. V6T 1Z3
Tel: (604) 822-5898
Fax: (604) 822-3562

DENTAL HYGIENE

DEGREE COMPLETION

PROGRAM

Faculty of Dentistry
The University of British Columbia

The Faculty of Dentistry offers a Dental Hygiene Degree Completion Program Leading to a Bachelor of Dental Science degree. The program may be undertaken on either a full-time (2 years) or part-time basis (up to 5 years to complete).

Closing date for receipt of fully documented applications is **April 15, 1996 for admission in September.**

Further information and application forms may be obtained from:



Admissions Coordinator
Faculty of Dentistry
University of British Columbia
2194 Health Sciences Mall
Vancouver, B.C. V6T 1Z3
Tel: (604) 822-3416
Fax: (604) 822-4532

ABSTRACT

prepared by Rita Chu, Dip DH, BDS candidate

ARTICLE:

Oral Health Challenges: Moving into the 21st Century

Author(s): Brown, K. and Larsen, M. D.

Journal: *Journal of Dental Hygiene*, Vol. 67, No. 7, 403-407, 1993.

ABSTRACT

Local, state and federal governments in the US have produced a national health agenda for the 21st century entitled "Healthy People 2000 Report: National Health Promotion and Disease Prevention Objectives". In this report, the 16 specifically identified oral health objectives are critically examined and strategies for achieving the objectives are provided. To meet the year 2000 objectives, dentists and dental hygienists must lobby for dental hygiene entry into a variety of settings to provide greatly needed oral healthcare to those without access and to those unable to afford oral healthcare in the traditional setting. Clinical dental hygienists must enhance their abilities with continuing education in the oral health field as well as in areas such as healthcare delivery, health education, and socio-demographics. In addition, insurance companies must be lobbied to promote prevention and the importance of oral healthcare must be stressed to federal governments responsible for reshaping health care. Progress toward each of the goals and objectives will require a concerted effort by a partnership of public and private organizations, dental hygienists, dentists, dental assistants, dental technicians, state and local health departments, and other health-related groups. Whether working in the public or private sector, the oral health professional can help meet the challenges of the year 2000.

CRITIQUE

The introduction of this opinion paper clearly states the problem and its significance. This is a timely article on a subject that needs immediate attention in the dental hygiene community. The Year 2000 oral health objectives are clearly laid out for us in a table. In general, specific strategies to help oral health personnel to jointly meet these specific objectives are provided. In particular, specific strategies for dental hygienists in the public and private sectors are outlined. These suggestions are supported with references to pilot projects, documents and the literature. The article is divided into different subjects with appropriate headings, making it easy to follow and to read. While this article is not "Canadian", we can easily apply the suggestions in Canada as well as follow what is happening in the US. This article needs to be followed up with progress reports to keep dental hygienists motivated and interested. I feel this paper provides public health and clinical dental hygienist alike with a starting point for becoming involved in and taking advantage of, imminent changes in health care and in the relatively new field of health promotion. It is valuable as it gives concrete ideas for action.

PROFILE

Danné Mykiety-Sherstobitoff, RDH, BS

The Speaker Circuit — Another Career Option for Dental Hygienists

220

Danné Mykiety-Sherstobitoff says she knew from the time she turned 13 that she was destined to become a dental hygienist. She says that growing up in a "dental family" helped her to appreciate the unique role of all dental professionals. While working in her father's office after school and during summer breaks she became familiar with the roles and responsibilities of all the players and it was that of the dental hygienist that intrigued her most.

Danné earned a Bachelor of Science degree in dental hygiene at the University of Washington in 1982. She then returned to her hometown of Trail, British Columbia to work in her father's dental office. Her father established his practice in 1956 and his daughter was the first dental hygienist to practice in it. It was while working there that she met her husband Rob and in January 1984 they ventured to Vancouver where he pursued a career in civil engineering.

While in Vancouver, Danné worked with Dr. Cary Galler, a periodontist and world-renowned lecturer. She says this is where she got the initial 'bug' for public speaking and delivering dentistry presentations. According to Danné, the influence Dr. Galler had on the future of her dental hygiene career was extensive. She fondly refers to him as one of her greatest 'mentors' noting that he introduced her to the art of seminar development, presentation delivery and the fundamentals of root instrumentation and non-surgical approaches to the treatment and management of periodontal disease.

Following her debut presentation, Danné continued to develop and present seminars in dentistry but she says that her real desire was to develop courses that had a practical application for the clinician. The topic that initially piqued her interest in this direction was that of the prevention and management of dentin sensitivity. At the same time, the use of ultrasonics for root debridement was becoming a "hot topic" on dental meeting agendas. Danné says it was a phenomenal presentation delivered by Dr. Irene Woodall at the 1991 BC Dental Meeting that motivated her to explore this instrumentation technique in depth.

For Danné a passion for excellence in dental hygiene coupled with a desire to provide the best care possible for her clients, fuelled her curiosity about ultrasonics. She discovered the work of Dr. Thomas Holbrook, a periodontist practising in Tampa, Florida who had been using ultrasonics exclusively for non-surgical periodontal treatment. Her interest in his techniques and methods led to a brief

visit which had an explosive impact on her dental hygiene career. "My entire clinical career in dental hygiene did a 180 degree turn — I discovered that with a manually tuned ultrasonic unit and modified inserts I could accomplish the task of root debridement effectively with comfort for the client during the procedure and no post-treatment dentin sensitivity."

Shortly after visiting Dr. Holbrook's office Danné met with Dr. David Pashley, a dentist and researcher in the field of dentin sensitivity at the Medical College in Georgia, and shared her new found knowledge. She was enthused to know that there existed a method of root debridement that helped prevent dentin sensitivity in clients with periodontal involvement.

With the support of her present employer, Dr. Graeme Yip and her co-workers, Danné began implementing the "Holbrook" technique of ultrasonic periodontal therapy into the practice. She says that observing the results clinically, and based on the positive feedback elicited by clients who were introduced to the technique, she knew it was knowledge she wanted to share with dental hygiene colleagues across the country. This objective led her to team up with dental hygienist Johanna Robbins and in 1993 they created a dental hygiene consulting company to develop and present continuing education workshops and seminars and provide clinical tutoring for groups and individuals. Danné says that Johanna's strong research skills complement her own presentation skills and together they have developed numerous didactic/clinical courses for dental hygienists. She reports that within two years the demand for the clinical courses she and Johanna offer continues to grow and has led her to incorporate the business.  Continued on page 222



Danné (right) and her partner Johanna were presenters at the 1994 FDI World Dental Congress in Vancouver.

ANNUAL INDEX VOLUME 29

N° 1 JAN/FEB 1995 pps 1-36

N° 3 MAY/JUN 1995 pps 77-116

N° 5 SEP/OCT 1995 pps 155-190

N° 2 MAR/APR 1995 pps 37-76

N° 4 JUL/AUG 1995 pps 117-154

N° 6 NOV/DEC 1995 pps 191-230

SUBJECT INDEX

Abstracts 22, 64, 104, 140, 170, 218

Annual Index Volume 29, 221

Book Reviews

Canada's Health Care System: Bordering on the Possible, reviewed by Joanne Clovis, 180

CDA Workbook on Infection Control: A Companion to the CDA Guidelines for Infection Control, reviewed by Dianne Landry, 105
Dental Radiography Laboratory Manual, reviewed by MWO Claude Bujold, 141

Elements of Dental Materials, reviewed by Dianne Landry, 30
Managing Oral Health Care Delivery: A Resource for Dental Professionals, reviewed by Audrey Newcombe, 141

Oral Pathology for the Dental Hygienist, reviewed by MWO Claude Bujold, 65

Risk Markers for Oral Diseases, Volume 3 – Periodontal Diseases: Markers of Disease Susceptibility and Activity, reviewed by MWO Claude Bujold, 10.

Second Opinion, reviewed by Catherine Thom, 30

Wilkins 7th Ed., reviewed by Nancy Vincent, 178

Canadian Dental Hygienists Association

News, 9-12, 46-49, 85-88, 123-126, 163-165, 199-201

CDHA 32nd Annual Session — Highlights, 163

CDHA Appoints New Corporate Relations Officer, 123

CDHA Board Members Meet in Ottawa to Set Priorities for Coming Year, 47

CDHA Elects Alberta Dental Hygienist as New Vice President, 163

CDHA Executive: Planning the Future and Helping Constituent Associations Meet Current Challenges, 9

CDHA Honours Its Own, 157

CDHA In the News: On the International Scene, 86

CDHA Position Statement on Tax Exempt Status of Dental Insurance Benefits, 1995, 47

New CDHA Board Members Participate in Orientation, 48

Case Studies

Dentin Sensitivity, 226

Guided Bone Regeneration, 74

Immediate Dental Implants, 112

Use of Tetracycline Fibre to Treat Localized Unstable Periodontitis, 150

Clinical Practice

A Review of Oral Fungal Infections and Appropriate Therapy (abstract), 170

Advice for Latex Allergy Sufferers (News), 123

Chlorhexidine Use After Two Decades of Over-the-Counter Use (abstract), 64

Current Perspectives on Improving Chairside Dental Education for Adults, 97

Dental Hygienist's Role in Screening for Oral Cancer (The), 53

Guided Bone Regeneration (Case Study), 72

Guidelines for Supportive Periodontal Therapy and When to Refer to a Periodontist, 185

Immediate Dental Implants (case study), 122

Is Dental Hygiene A Profession? A Literature Review, 127

Light at End of Carpal Tunnel (News), 87

Oral Leukoplakia and Erythroplakia: A Review and Update (abstract), 64

Oral Side-effects of the most frequently prescribed drugs (abstract), 22

Parents in the Operatory (abstract), 104

Staying Excited about Dentistry (abstract), 104

"What do people want from dentistry?" An Action Research Approach, 202

Editorials

Amer, S., 7

Boomhour, L., 3

Goulding, M., 193

Guest, L., 39

Landry, D., 117

Simpson, J., 79

Education

Allied Dental Educators Committee to Undertake Membership Survey (News), 125

Congratulating 1995 Dental Hygiene Graduates (News), 164

Continuing Education Courses, 29, 63, 108, 146, 182, 216

Dalhousie School of Dental Hygiene Appoints New Director (News), 165

Dental Hygienist Serves As Acting Dean, Faculty of Dentistry, 199

Resource Centre (new acquisitions), 21, 60, 95, 142, 188, 228

Ontario Dental Hygiene Educators Form New Association (News), 12

University of Alberta, Faculty of Dentistry — Update (News), 11

Ethics

Applied Ethics: Voicing our Values, 18

Ethical Dilemma Case Studies, 26, 50, 106, 144

Verifying the Relevancy of CDHA's Code of Ethics, 209

Family Violence Issues

Family Violence — An Issue of Our Times (Editorial), 79

Obituaries

Brennan, Andrea, 86

Hopewell, Veda, 49

Oral Health Promotion

CDHA Dental Hygiene Community Health Grant, 162

CDHA Talks with Parents at Toronto's Annual Parent Show (News), 49

"Creating a New Agenda for Health" theme for Canada Health Day (News), 49

Dental Hygiene Students Elaborate on Scope of DH Practice to Health Professionals (Student Scene), 69

Dental Hygiene Students Open the Door (Student Scene), 149

Educating Teens: University of Manitoba Dental Hygiene Students Connect (Student Scene), 33

Federal Government Officially Recognizes National Dental Hygiene Week (News), 9

Health Promotion On-line (News), 126

National Dental Hygiene Campaign 1994, 67

National Dental Hygiene Campaign 1995, 69, Vol 29, No 3: 12-page insertion, 122,162

The Collaborative Development of Going to the Dentist: A Kit for Integrating Dental Information and Language Skills, 89

Oral Health Care

Beyond the Call of Duty... Providing Oral Health Care in the Honduras, 96

Canada's First Dental Hygiene Clinic Open For Service, 199

Fifty Years of Water Fluoridation in Canada (News), 88

Health & Socio-Economic Inequalities, 166

Meeting the Needs of Under-Served Communities: One University's Externship Experiment, 175

Practice Profiles

Burnham, Nina Dip DH Canada's First Native Dental Hygienist, 101

Contreras, Beverley, Dip DH, 59

Ferguson, Melinda, BSc, Dip DH, 147

Mykietyń-Sherstobitoff, Dianne, RDH, BS, 220

Ropchan, Penny, Dip DH, 31

President's Message

Borowko, M., 7, 43, 83

Forgay, M., 121, 161, 197

Professional Development

AquaFresh Student Scholarship Program, 6, 124

CDHA/ACED Educator's Workshop Deemed a Success, 10

CDHA Dental Hygiene Research Grant, 6, 157

CDHA/Procter & Gamble Graduate Student Research Award, 6, 123

CDHA Professional Conference 1995: 23, 61, 110, 171

CDHA Professional Conference 1996: 146, 162, 177, 224

CDHA Dental Hygiene Community Health Grant, 162

Dental Hygiene Research Expertise Recognized by Dental Industry, 32

Information Sharing with our American Colleagues, 86

NDHCB Examination Committee Struck, 87

Provincial Dental Hygiene (News)

ADHA Hires Member Services Coordinator, 10

ADHA Honours Two Alberta Dental Hygienists, 164

Atlantic Provinces Discuss Self-Regulation in Halifax, 165

BCDHA: Setting a New Stage for the Profession, 11

British Columbia Establishes College of Dental Hygienists, 46

CDHA Executive's Visit to Newfoundland, 164

CDHO Hires Registrar/Chief Administrative Officer, 12

CDHO President Earns MA, 200

CDHO Promotes Dental Hygiene at the Ontario Hospital Association Conference, 12

College of Dental Hygienists of BC Appoints Registrar, 85

College of Dental Hygienists of BC Elects Chair & Vice-Chair, 85

Ontario Dental Hygiene Educators Form New Association, 12

Ontario Francophone Dental Hygienists Form New Organization, 48

Ordre des Hygiénistes Dentaires du Québec Appoints New General Director, 200

New Brunswick DHA Twenty Years Young... and Growing, 48

University of Manitoba to Confer "Professor Emerita" Title on Marnie Forgay in June, 87

Quality Assurance

Quality Assessment in Continuing Education: An Example of an Instrument Sharpening Workshop for Dental Hygienists, 13

Research Methodology

"What do people want from dentistry?" An Action Research Approach, 202

Self-Assessment Tests

Aging (Facts On), 143

Carpal Tunnel Syndrome, 215

Dental Hygiene Care for Individuals with Special Needs, 184

Oral Microbiology, 66

Preventive Dentistry, 28

Radiography, 103

Students' Scene, 33, 69, 149

News From Schools, 133.

AUTHOR INDEX

Abrahams, O.: Student Scene: Educating Teens: U of M Dental Hygiene Students Connect, 33

Adams, M.: Self-Assessment: Facts on Aging, 143

Amer, S.: Family Violence: An Issue of Our Times (editorial), 81

Berthelot, J.: Health & Socio-economic Inequalities, 166

Brok, D.: Student Scene, Educating Teens: U of M Dental Hygiene Students Connect, 33

Barr Overholt, C.: Abstracts, 22, 64, 104, 140, 170, 218

Boomhour, L.: Look Beyond the Obvious (editorial), 3

Borowko, M.: President's Message, The Survey Says 7, Debate is Great 43, Challenges Stimulate Opportunities 83

221

Bujold, C.: Book Reviews: 65, 105, 141 Self-Assessment: Radiography, 103

Burnham, N.: Practice Profile — Career Reflections by Canada's First Native Dental Hygienist, 101

Cameron, S.: Student Scene: Dental Hygiene Students Open The Door, 149

Carlson-Mann, L.: Case studies: Guided Bone Regeneration 72, Immediate Dental Implants 112, Use of Tetracycline Fibre to Treat Localized Unstable Periodontitis 150, Guidelines for Supportive Periodontal Therapy and When to Refer to a Periodontist, 185, Dentin Sensitivity, 226

Cloviss, J.: Book Review: Canada's Health System: Bordering on the Possible, 180

Chiodo, G.: Applied Ethics: Voicing our Values, 18

Chu, R.: "What do people want from dentistry?" An Action Research Approach, 202

Contreras, B.: Practice Profile, 59

Cormier, L.: The Dental Hygienist's Role in Screening for Oral Cancer, 53

Craig, B.: "What do people want from dentistry?" An Action Research Approach, 202

Croucher, R.: Current Perspectives on Improving Chairside Dental Education for Adults, 97

Dick, B.: The Collaborative Development of Going to the Dentist: A Kit for Integrating Dental Information and Language Skills, 89

Drewry, B.: "What do people want from dentistry?" An Action Research Approach, 202

Ferguson, M.: Practice Profile, 147

Fortune, B.: Ethics Column 26, 50, 144, Verifying the relevancy of CDHA's Code of Ethics, 209

Forgay, M.: President's Message: Looking Back... 121, PSR is Launched in Canada 161, Shaping our Future 197

Guest, L.: Don't Chew Up Every Article You Read (editorial) 39

Landry, D.: Book Reviews: 30, 105 Editorial: Routine Dangers 117, Applied Ethics: Voicing our Values based on a presentation by Dr. Gary Chiodo 18

Langevin, L.: Beyond the Call of Duty, Providing Oral Health Care in the Honduras, 96

Lautar, C.: Is Dental Hygiene a Profession: A Literature Review, 127

Lavelle, C. L. B.: The Dental Hygienist's Role in Screening for Oral Cancer, 53

Mykiety-Sherstobitoff, D.: Practice Profile, 220

Neish, N.: Ethics Column, 26, 50, 144, Verifying the Relevancy of CDHA's Code of Ethics, 209

Newcombe, A.: Book Review, 141

Odlum, O.: Meeting the Needs of Under-Served Communities: One University's Externship Experience, 175

Pegg, D.: Self-Assessment Test: Preventive Dentistry in Dental Hygiene, 28

Pyett, M.: Self-Assessment Test: Oral Microbiology, 66

Raynak, S.: Self-Assessment: Dental Hygiene Care for Individuals with Special Needs, 184

Regier, C.: Student Scene: Educating Teens: U of M Dental Hygiene Students Connect, 33

Rhude, S.: Ethics Column, 106

Roberge, R.: Health & Socio-Economic Inequalities, 166

Ropchan, P.: Practice Profile, 31

Sheiham, A.: Current Perspectives on Improving Chairside Dental Education for Adults, 97

Simpson, J.: Family Violence: An Issue of Our Times (editorial) 81

Thom, C.: Book Review: Second Opinion, 30

Vincent, N.: Book Review: Wilkins 7th Edition, 178

Wener, M.: The Collaborative Development of Going to the Dentist: A Kit for Integrating Dental Information and Language Skills, 89

Wolfson, M.: Health & Socio-economic Inequalities, 166

222

Continued from page 220

Danné admits she never dreamed her dental hygiene education would lead her in this direction, and although her first love continues to be the practice of clinical dental hygiene, the unique opportunities she has discovered in her career continue to multiply. She says her "entrepreneurial mind" continues to work overtime and she

recently developed an ultrasonic prototype that she uses in her clinical courses to help clinicians in modifying ultrasonic inserts to lengthen the life of their ultrasonic tips. Although she is not sure what tomorrow holds for her, she says that for her each day of her dental hygiene career has been exciting and as rewarding as the first!

Danné will be at CDHA's 7th Annual Professional Conference to deliver a presentation entitled "A Practical Approach for the Prevention and Management of Dentin Sensitivity" on Sunday, June 9 at the Westin Hotel.

LISTERINE

ANTISEPTIC - ANTIPLAQUE
ANTINGIVITIS - MOUTHWASH

INDICATIONS: Helps reduce gingivitis (minor inflammation of the gums caused by plaque above the gumline) when used in a conscientiously applied program of oral hygiene and dental care. Kills the germs that cause bad breath, plaque, gingivitis and sore throats due to colds.

CAUTIONS: Keep out of reach of children. Do not swallow. Not to be used by children under 12 years of age. In case of accidental ingestion, contact a Poison Control Centre or doctor immediately.

DOSAGE: Rinse full strength with 20 mL for 30 seconds twice a day.

MEDICINAL INGREDIENTS: Eucalyptol 0.091% w/v, Thymol 0.063% w/v, Menthol 0.042% w/v.

NON-MEDICINAL INGREDIENT: Alcohol.

NOTE: Cold temperatures may cloud this product, its efficacy will not be affected.

SUPPLIED:

Original Listerine: Clear, amber liquid available in bottles of 250, 500, 750, and 1,000 mL.

Cool Mint Listerine: Clear, blue, cool mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.

Fresh Burst Listerine: Clear, green, mint flavoured liquid available in bottles of 250, 500, 750, and 1,000 mL.

LISTERINE FIGHTS GINGIVITIS
WITHOUT STAINING

WARNER
WELLCORE

TM Warner-Lambert Company Inc. use Scarborough, Ontario M1L 2H3

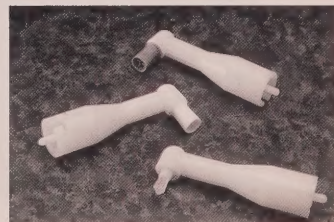


DISPOSABLE PROPHY ANGLE

The new **Disposable Butler GUM Propphy Angle** features a purge pump incorporated into the housing unit to expel materials out of the angle, which reduces the risk of excess handpiece wear and cross contamination. The twin rib **GUM** cup has polishing ribs on the outside and cleaning ribs on the inside to enhance cleaning in subgingival and interproximal areas. Available in firm, soft and tapered brush.

For more information or to order call
1-800-265-8353

John O. Butler Company



Congratulations!

THE ORIGINAL
Sulcabrush® is
with REPLACEABLE TIPS



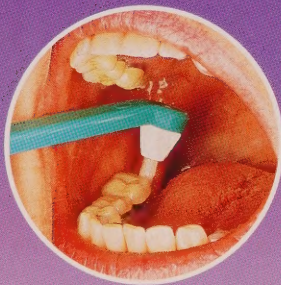
Recognized by the **Canadian Dental Association**

RECOMMENDED FOR PATIENTS WHO HAVE DIFFICULTY FLOSSING!



The Dental Advisor Plus*

91% Approval Rating



The **Sulcabrush®** was proven **better than dental floss** in some parts and **equal to dental floss** in other parts of the teeth and gums,
for the removal of plaque and the reduction of gingivitis.

Studies performed by:

Columbia University *
School of Dental and Oral Surgery

University At Buffalo *
School of Dental Medicine

Indiana University *
School of Dentistry

Sulcabrush Inc. 1-800-387-8777

U.S. Patent No.: 4,679,272

Cdn. Patent No.: 1,247,311

* Reprints Available



Canadian Dental Hygienists Association
announces its
7th Annual Professional Conference

**INTERDEPENDENCE AND
INDEPENDENCE:
STRIKING A BALANCE**

June 7-9, 1996
The Westin Hotel • Calgary, Alberta

2nd Call for Abstracts
Posters/Free Papers/Table Clinics

The Submissions of abstracts for free papers, posters and table clinic presentations which are related to any aspect of dental hygiene practice are invited. **Your intent to submit an abstract, including your name and title of the abstract, must be made known to the CDHA Conference Coordinator by December 15, 1995.**

The deadline for submissions of abstracts for free papers, posters and table clinics is **February 1, 1996**. Selection will be on the basis of the quality of abstracts. Notification of authors of accepted or rejected abstracts will be made by March 1, 1996. All selected abstracts will be published in the Conference Program.

Completed papers must be submitted by April 10, 1996 for potential publication in *Probe*, CDHA's scientific journal.

For additional information contact:

CDHA Central Office
96 CentrepoinTE Dr.
Nepean, ON K2G 6B1

Author should submit one copy of Appendix A by **February 1, 1996**.

APPENDIX A FOR ABSTRACT

CDHA's 7th Professional Conference
*Interdependence & Independence:
Striking a Balance*
Calgary, Alberta • June 7-9, 1995

Deadline date for Abstracts:
February 1, 1996

First Author: _____
Affiliation: _____
Address: _____
City: _____ Prov./State: _____
Postal/Zip Code: _____
Telephone: Bus. () _____
 Res. () _____
Additional Authors (Names only):

It is expected that first authors will present the papers unless otherwise specified.

Choice of Presentation Format

- ☐ Oral presentation (Free Paper)
☐ Poster presentation
☐ Table clinic

Abstracts should be submitted to:
CDHA Central Office
96 CentrepoinTE Dr.
Nepean, ON K2G 6B1

*Type perfect original of abstract here. Do not type beyond outline of box.
Include title, purpose, method & results*

CDHA'S 7th ANNUAL PROFESSIONAL CONFERENCE
HOSTED BY THE ALBERTA DENTAL HYGIENISTS' ASSOCIATION

Interdependence and Independence: Striking a Balance

*The one time each year for
Dental Hygiene Colleagues from
all provinces to come together!*

**WESTIN HOTEL, CALGARY, AB
JUNE 7-9, 1996**

*Here's a sneak preview of the program
the Local Planning Committee, headed by
Joyce Geldreich of Calgary, is lining up. It's
being designed to help you discover how you
can strike a balance and work interdepen-
dently and independently in the future:*

- **Dr. Pran Manga** will help you understand how the nature of health care delivery is changing to meet changing economic demands;
- **Anna Pattison**, Associate Professor at the University of Southern California will discuss *advanced periodontal instrumentation*;
- **Janice McCaffrey** of Calgary, Alberta: Walk a mile in this Olympian's shoes and discover the mindset of a champion;
- **Danné Mykietyn-Sherstobitoff** of Langley, BC will discuss *prevention and management of dentin sensitivity*;
- **Celebrating Dental Hygiene: Creating and Recognizing Opportunities** is a half-day lecture devoted to how you can take control of your future by examining the multitude of job opportunities and options available; to dental hygienists;
- **Dentsply Canada** presents **Marilyn Goulding** on the topics of *chemotherapeutics, local debridement and host response*;

...and this is just the beginning!!



Read Probe to learn more about what's in store for you next June in Calgary and watch for the Delegate Registration Form in the next issue of Probe.

by Leanne D. Carlson-Mann, Dip DT, Dip DH

Dentin Hypersensitivity

DEFINITION

Dentin hypersensitivity is transient pain arising from exposed dentin, typically in response to chemical, thermal, tactile or osmotic stimuli which cannot be explained as arising from any other form of dental defect or pathology.

226

While the exact mode of transmission of stimuli across dentin is still unclear, two current theories describing the mechanism of hypersensitivity are:

HYDRODYNAMIC THEORY

This theory states that stimuli increase the rate of fluid flow through dentinal tubules to activate pulpal fibres, possibly by a mechanoreceptor response.

MODIFIED HYDRODYNAMIC THEORY

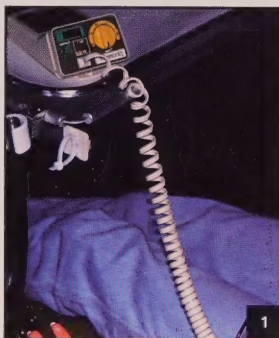
This theory states that desensitization of dentin can be achieved by blocking nerve activity (direct ionic diffusion).

The hydrodynamic theory appears to be most commonly accepted.

One major etiological factor in gingival recession and sensitivity is chronic trauma from toothbrushing. Studies indicate that exposure of cervical dentin is most commonly found on buccal surfaces of canines and premolars. It also increases with age and its presence is higher in populations with good oral hygiene as compared with those with poor oral hygiene.^{1,2}

Other factors such as habits (i.e. bruxism) and periodontal surgery can readily produce recession. Anatomical features which may predispose to recession and sensitivity include buccal placement of teeth, frenal attachments and developmental fenestrations of the alveolar bone. Loss of hard tissue can occur cervically by abrasion and/or erosion. Illness such as bulimia or diet can result in damage as can medication and exposure to excessive acid in occupational environments.

Available data suggest that chronic abrasive influences can expose and remove dentin in localized areas, however these localized areas are not necessarily potential sites for dentin hypersensitivity. Erosive factors, on the other hand, particularly acids, will remove both enamel and dentin and readily open dentin tubules, thereby having the potential to both localize and initiate sensitivity.

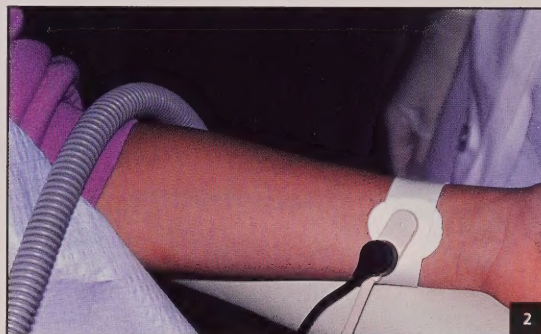


History

A 45-year old woman presents with generalized sensitivity of her teeth to temperature, eating and brushing.

Examination

The client is generally in good health. Periodontal probing depths are 3-4 mm, however there is 4-7 mm of generalized recession in the lower arch. Occlusion is satisfactory. Discussion about present home care regime reveals that the client has used a hard toothbrush with a back and forth scrubbing motion across the teeth. Results were several areas of exposed cervical dentin with severe erosion on buccal of 33, 34 and 35.



1. Phoresor.
2. Electrode attached to client's arm.
3. Client during phoresor treatment (full upper and lower). Notice a rubber dam is being utilized during treatment to isolate teeth. This step is left to the discretion of the individual operator.

Treatment Options

1. Blockage of dentin tubule orifices
 - Resins and varnishes can be effective but are easily removed by toothbrushing.
 - Active obliterating agents include sodium, stannous and hydrogen fluorides, potassium oxalate, glycerin, ferric oxalate and potassium nitrate.
 - Laser treatment (clinical data is not yet available).
 - Desensitizing toothpastes: despite the accreditation of some authorities, evidence is lacking on the ability of a dentifrice to be effective. Active ingredients such as potassium and strontium are promoted but lack sound scientific evidence of effectiveness.^{3,4}
 - Iontophoresis: In this a technique, medications are applied topically with the assistance of a small electrical current. The electrical current facilitates the transfer of ions into soft or hard tissues for therapeutic purposes. The technique ensures a significantly greater penetration of the fluoride ion into the dentin when compared to topical application. Iontophoresis is time-consuming and technique sensitive.⁵
2. Restorations (CI V – dentin bonding)
 - Adhesive restorative materials such as glass ionomer cements appear effective but few controlled studies are available.
 - Chemical treatments include light cured dental resin.
3. Muco-gingival surgery for localized areas.

Depending on the condition of internal (pulp) and external tooth structures (cementum, enamel) treatment options may include:

4. Root canal therapy.
5. Tooth extraction.

Treatment of Choice

It was determined that the client's toothcleaning habits were the major cause of the dentin sensitivity. Periodontal surgery or major restorative procedures were not considered as options. Where generalized sensitivity is a problem, obliteration of dentin tubules with a sharp curet followed by application of a light cured resin* or use of iontophoresis (Phoresor™) have shown repeated successful clinical results.

Discussion

The client was given instruction on the Modified Bass toothbrushing technique using a soft toothbrush. This was followed by treatment with the iontophoresor.** Success was achieved everywhere but at the lower left canine and premolars. Because of the severe erosion in these areas, dentin bonding was performed, thus eliminating sensitivity and providing a more aesthetic result.

** IONTOPHORESIS TREATMENT

An alginate impression is taken of each arch to be treated by the iontophoresor. A standard metal tray is utilized and care should be given to remove excess alginate after the impression has set. A 1% Fl2 solution in liquid form is then carefully placed in the impression and subsequently in the client's mouth. Cotton pellets soaked in the Fl2 solution are placed in wide interproximal spaces. The current of the phoresor is then activated (9 volt battery at 1.0 MA – min. for 15 minutes per arch). Because of the size of the trays, upper and lower arches are treated individually. Isolation of the teeth to be treated and control of moisture are two important requirements. If a single tooth is to be treated individually, a plastic tip or brush may

be used. The current is then set at 2.0 MA – min. and the timer is set for five minutes per surface treated. Clients are instructed not to eat or drink for one hour after the treatment has been provided.

Clients suffering from cardiac-related diseases (e.g. myocardial disease, arrhythmia) are contraindicated for treatment unless otherwise approved by their physician. Iontophoresis is also not recommended for use on open wounds.

Prevention

At the outset, a correct diagnosis of dentin hypersensitivity is necessary. Information to be gathered includes:

1. Tooth cleaning habits, including frequency and duration of brushing, type of brush, brushing technique, interval of brush change, brush wear and diet to brushing times.
2. Dental habits such as use of toothpicks, bruxism etc.
3. Exposure to erosion factors, i.e. working and living environments, medications, illness and diet. A dietary analysis may be in order.
4. Smokeless tobacco and tooth whitener overuse.

After identifying predisposing and etiological factors, advice can be provided to the client on appropriate brushing habits, diet and intake of acidic foods and liquids. Oral examination will identify anatomical factors which may be correctable through periodontal procedures such as frenectomy and soft tissue grafting.

*Perfection Kit, Light Cured, DenMat Corporation

™Motion Control Inc., 1005 South 300 West, Salt Lake City, Utah 84101.



4. Lower left cuspid and premolars prior to bonding.
5. Lower left cuspid and premolars after bonding procedures.

References

- 1 O'Leary T. J., Drake R. B., Jividen G. J., Allen M. F.: The Incidence of Recession in Young Males: Relationship to Gingival and Plaque Scores. *USAF School Aerospace med* 1967; 1-4, 67-97.
- 2 Woolfer C.: The Prevalence and Etiology of Gingival Recession, *Periodontal Abstr* 1969, 17, 45-50.
- 3 Addy, M., Dowell, P.: Dentine Hypersensitivity: A Review. Clinical and In Vitro Evaluation of Treatment Agents. *J. Clinical Periodontal* 1983, 10:351.
- 4 Addy, M., Mostafa, P.: Dentine Hypersensitivity: I. Effects Produced by the Uptake in Vitro of Metal Ions, Fluoride and Formaldehyde Onto Dentine. *J. Oral Rehabil* 1988, 15:575-579.
- 5 Gillam, D. G., Newman, H. N.: Iontophoresis in the Treatment of Cervical Dentine Sensitivity — A Review. *Periodontal Abstracts*, Vol 38, No 4, 1990.

Editor's Note: Case Studies are presented for the interest of our members. However, CDHA is not endorsing any specific interventions.

We welcome submissions of this nature from our readers to encourage an exchange of information. Forward submissions to *Probe*, Attn: Editorial Director, 96 Centrepointe Dr., Nepean, ON K2G 6B1.

Dental Hygienist Wanted

- Four days per week — \$200.00 per day
- One month paid vacation per year worked
- 6 to 8 clients per day, small town practice
- 4 hour drive to Jasper
- Snowboarder preferred
- Some relocation assistance available
- You must qualify to have your Alberta License

Send CV to: Box 539, Beaverlodge, AB T0H 0C0
or call (403) 354-2174, leave message

Switzerland

Dental Hygienists/Periodontal Therapist needed in solo practice with team of three hygienists, central Zurich, by November 1995 and April 1996. Furnished apartment available. Send complete application (resumé, copy of diploma, recommendations, photo, personal data) or contact

Dr. F. Gressly
Gartenstrasse 33, CH-8002 Zurich
Tel: 41-1-201 30 62
Fax: 41-1-201 24 09

Newfoundland

MARYSTOWN-ST. LAWRENCE

Hygienist wanted for extremely busy dental office. Brand new office with all the latest in equipment and facilities as well as satellite practice. Significant earning potential. Current Hygienist earning \$70,000+ per annum. Interested individuals apply in writing to

Amanda Lambe – Office Coordinator
PO Box 627
Marystown, NF
A0E 2M0

Dental Hygiene Watch

- White Italian leather band with gold tone casing
- 1" diameter white face with gold imprinting
- Five year manufacturer's warranty
- Cost of \$50.00 includes GST, postage and handling
- Send cheque or money order to: Northern Alberta

Dental Hygienists' Society, c/o Sabrina Heglund, RDH

73 Parker Ridge
53050 RR 220
Ardrossan, AB
T8E 2C7
or call (403) 922-5164

- Proceeds will be used to fund projects of the Northern Alberta Dental Hygienists' Society



Face as illustrated

Classified Ad Rates

Fifty (50) words or less, \$26.75 (GST included)
Additional words: \$0.54 per word (GST included)

Closing date for receipt of copy is approximately one month prior to publication date:

DEADLINE	ISSUE	CIRCULATION DATE
December 10	January/February	January 15
February 10	March/April	March 15
April 10	May/June	May 15
June 10	July/August	July 15
August 10	September/October	September 15
October 10	November/December	November 15

Associations and/or commercial Classified Ad Rates:
1/2 page (\$428.00 GST included)
1/4 page (\$214.00 GST included)

No agency commissions on classified advertising.

Ads will not accepted over the phone, direct advertising copy with payment to:

Canadian Dental Hygienists Association
96 Centrepoinde Dr.
Nepean, ON K2G 6B1

Note: GST does not apply to out-of-country classified advertisers.

Advertisers' Index

ASH TEMPLE	IFC
BUTLER	OBC, 222
BAUSCH & LOMB	198
CANADIAN CENTER FOR CONTINUING EDUCATION.....	217
DENTICATOR	IBC
PERIOREPORTS.....	210
PREMIER DENTAL	213
SEPTODONT	209
SULCABRUSH	223
TELEDYNE WATERPIK.....	Centre Spread
UNIVERSITY OF BRITISH COLUMBIA.....	219
WARNER LAMBERT.....	194, 222
YOUNG DENTAL	196

CDHA Member Resource Centre — New Acquisition

PUBLIC VISUAL AIDS

The Chairside Instructor (one available)
Produced by the American Dental Association, 1990

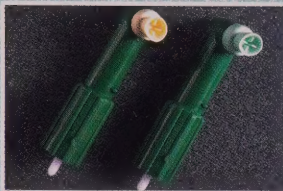
A pictorial guide to case presentation of oral anatomy, disorders of the mouth, prevention, treatment, surgical procedures and cosmetic techniques.

Denticator Prophy Products

Now
Available
Throughout
Canada!

Order From Your
Dealer Today!

DISPOSABLE PROPHY ANGLES



ORIGINAL GREEN

- proven quality—rated #1 for performance by a prestigious independent lab
- excellent cleaning—4 web cup in soft green and regular white



NEW DIAMOND

Longer, deeper prophy cup.

- holds more paste and virtually eliminates splatter
- soft pink or regular white cup

AUTOCLAVABLE PROPHY ANGLES



SHEER PRECISION

- fully sealed—O Ring seals out grit and extends the life of the angle
- easy maintenance—does not require disassembly for lubrication

PROPHY CUPS



EXCELLENT CLEANING & PERFORMANCE

- 4 web cup for quick, quality cleaning
- diamond cup holds more paste and virtually eliminates splatter.

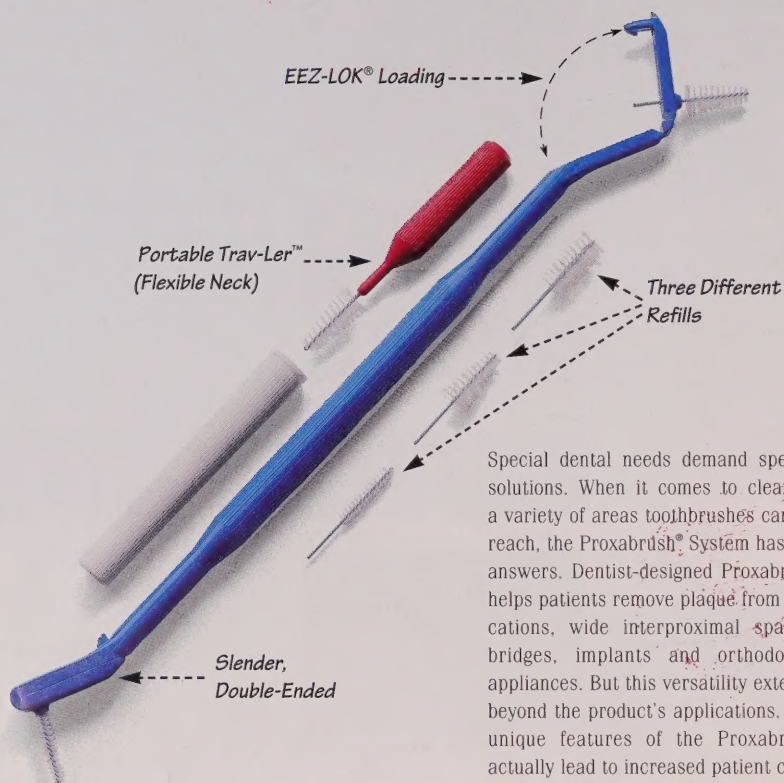
Denticator®
SINCE 1931

For more product information:

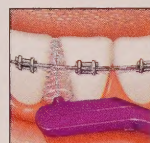
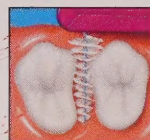
DENTICATOR

11330 Sunrise Center Drive, Suite A, Rancho Cordova, CA 95742
916/638-9303

BUTLER 



Special dental needs demand special solutions. When it comes to cleaning a variety of areas toothbrushes cannot reach, the Proxabrush® System has the answers. Dentist-designed Proxabrush helps patients remove plaque from furcations, wide interproximal spaces, bridges, implants and orthodontic appliances. But this versatility extends beyond the product's applications. The unique features of the Proxabrush actually lead to increased patient compliance. The EEZ-LOK® loading design makes Proxabrush easy to load and the slender head provides access to even the tightest places. A double-ended design allows for different sized refills on each end while three refill shapes eliminate the difficulty of cleaning different sized spaces. For patients on the go, the Trav-Ler™ adds portability and convenience. Give your patients the Proxabrush solution for their special needs.



BUTLER
GUM®

PROXABRUSH®

**DESIGNED WITH MORE
THAN ONE SOLUTION IN MIND**



John O. Butler Company,
515 Governors Road, Guelph, Ontario, N1K 1C7
1-800-265-8353

